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IDENTIFIERS	*Colorado Technical College

ABSTRACT

During January 23-24, 1984, a North Central Association of Colleges and Schools evaluation team visited Colorado Technical College to conduct a comprehensive evaluation for continued accreditation at the bachelor's degree granting level. The accreditation was continued as a result, and it was recommended that a comprehensive evaluation be scheduled in 1986-1987 to look at such areas as: high faculty turnover; instructional programs with marginal enrollment, equipment, or technical depth; lack of faculty development; and new administrative adjustments resulting from a change in administration. Information and institutional data are provided relative to the concerns addressed in the focused visit of May 18-19, 1987. The process discussed took place from June 1984 to February 1987. An examination of the areas of focus is offered. These areas include (1) finances (the ability to support staffing and equipment) and (2) the institution's progress in long range planning. A future plans summary and a summary assessment of the area of focus are provided. Conclusions are: the enrollment decline has stopped; the college has taken the right steps to turn around the financial base and develop a realistic long range plan; and the college is confident that all of the 1984 concerns have been addressed. Attachments include Data Form C (instructional staff and faculty number, degree, and salary; Data Form D (income and expenditures); items available and displayed for review; agenda issues; and an official response to the concerns expressed by the visiting team. Five appendices provide outlines of the college's new programs in computer engineering and defense systems management; a job description for an Associate Dean/Department Chair; employee training forms; a descriptive list of area colleges for purposes of comparison; and several news releases. (SM)

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ED299851

A Focused Report

Presented To

North Central Association of Colleges and Schools

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COLORADO TECHNICAL COLLEGE
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MAY, 1987

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COLORADO TECH

TO: Dr. Steven Crow
Assistant Director, NCA

Dr. Robert P. Sorensen
Team Chairperson

Dr. Robert R. Roehrich
Evaluation Team Member

Valued Team Members and Supporters of Colorado Tech

FROM: David D. O'Donnell
President, Colorado Tech

SUBJECT: Evaluation Visit to Colorado Technical College on May 18-19, 1987

DATE: April 10, 1987

This report and attachments are being forwarded as required by the established criteria for a focused evaluation visit.

The eight sections of this report identified in the table of contents (Section 2) address the required information needed to prepare the visiting team prior to their on-sight visit. Attachments include the College Catalog, Faculty Handbook, and collateral materials.

Colorado Tech appreciates the sensitivity and support provided by the North Central Association during the most difficult time in its history (1983-1986), and Colorado Tech is confident the report will justify the trust and confidence the North Central Association placed in us.

Colorado Technical College
655 Elkton Drive
Colorado Springs.
Colorado 80907
(303) 598-0200

We are also certain that these investments in Colorado Tech by the NCA will be rewarded when the evaluation team finds a dynamic, healthy and growing institution which will not only be a credit to its accrediting body, but a model of what can be achieved.

Sincerely,

David D. O'Donnell

David D. O'Donnell
President

DDO/hm

Attachments:
1. College Catalog
2. Faculty Handbook
3. Collateral Materials

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NORTH CENTRAL ASSOCIATION OF COLLEGES AND SCHOOLS
Commission on Institutions of Higher Education
159 North Dearborn Street, Chicago, Illinois 60601

AFFILIATION STATUS OF

COLORADO TECHNICAL COLLEGE
655 Elkton Drive
Colorado Springs, CO 80907

(Effective February 21, 1986)

CONTROL:	Colorado Technical College is a private, for-profit institution owned by M.D.J.B., since 1980.
STATUS:	Colorado Technical College is accredited by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools. Accredited: 1980- .
EDUCATIONAL PROGRAMS:	The College offers programs leading to Certificates, the Associate's (vocational-technical curricula) degree, and the Bachelor's (professional curricula) degree. It also offers credit courses not part of these programs.
LOCATIONS:	The College offers courses and programs at its campus in Colorado Springs, Colorado; some courses and programs are offered at Lowry AFB in Denver, Colorado. Some courses are also offered at corporate sites in the Greater Colorado Springs and Greater Denver areas.
STIPULATIONS:	None.
REPORTS REQUIRED:	None.
FOCUSED EVALUATIONS:	The College is scheduled to have an evaluation in 1986-87 focused on a) finances, particularly the ability to support staffing and equipment, and b) the institution's progress in long-range planning.
COMPREHENSIVE EVALUATIONS:	Colorado Technical College's most recent comprehensive evaluation occurred in 1983-1984. Its next comprehensive evaluation is scheduled for 1988-1989.

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COLORADO TECHNICAL COLLEGE

FOCUSED REPORT

Chapter 1

INTRODUCTION

During the period January 23-24, 1984, a North Central Association of Colleges and Schools evaluation team visited Colorado Technical College for the purpose of conducting a comprehensive evaluation of the College for continued accreditation at the bachelor's degree granting level.

After conducting the accreditation visit, the evaluation team recommended that (1) the accreditation of Colorado Technical College be continued at the bachelor's degree level; and (2) a comprehensive evaluation be scheduled in three years, 1986-1987.

The reasons given by the evaluation team for recommending the comprehensive evaluation of the bachelor's degree program in 1986-1987 were as follows:

1. Some of the instructional programs are marginal in enrollment, equipment and/or technical depth.

2. Turnover in faculty is high. There is doubt that CTC will be able to retain and attract new faculty with the relatively low salary structure that now exists.

3. There is lack of faculty professional development.

4. There is also some concern that CTC will be able to generate sufficient funds to finance needed faculty and provide for new and replacement of equipment.

5. A significant change in administration has occurred and new administrative adjustments are in progress.

Following receipt of the "Report of a Visit to Colorado Technical College," the administration selected the Focused Process for review of the materials related to the evaluation visit. President Sullivan and Dr. McPeek then met with the

Review Committee in Chicago on May 7, 1984. President Sullivan requested that the proposed comprehensive visit in three years be changed to a comprehensive visit in five years with a focused visit on the identified concerns at the three year point.

Colorado Technical College was notified on May 8, 1984 of the recommendation made by the Review Committee to the Executive Committee to grant the request. The recommendation also changed the Statement of Affiliation Status of the College as follows:

1. Focused Evaluations: The College is scheduled to have an evaluation in 1986-1987 focused on a) finances, particularly the ability to support staffing and equipment, and b) the institution's progress in long range planning.

2. Comprehensive Evaluations: Colorado Technical College's most recent comprehensive evaluation occurred in 1983-1984. It's next comprehensive evaluation is scheduled for 1988-1989.

The purpose of this report is to provide information and institutional data relative to the concerns to be addressed in the focused visit scheduled for May 18-19, 1987.

This report is organized into three sections: Introduction, An Examination of the Areas of Focus, and A Summary Assessment of the Areas of Focus. It will focus on the two areas of concern noted by the Review Committee in May, 1984. The Scope will be limited to the topics delineated in the North Central Association's 1986-1988 publications entitled, A Guide for Self-Study and Evaluation, Chapter VI, "Focused Evaluations"; and A Manual For The Evaluation Visit, Chapter VI, "Focused Evaluations."

The process that is discussed in this report took place during the period from June, 1984 to February, 1987. Initially, Dr. William C. McPeek, then Vice President of Academic Affairs/Dean, requested that each academic department review the

courses offered for currency, technical depth, training equipment deficiencies, and marginal enrollment. The results of the reviews were to be furnished to the Curriculum Committee. Input was also requested from the Industrial Advisory Committees for the various programs. This resulted in a number of improvements to the technical curricula being recommended and implemented, primarily in the Electronic Engineering Technology program. Equipment deficiencies were also identified and a limited amount of equipment was purchased during 1984 and 1985.

The Curriculum Committee recommended to President Sullivan that the B.S. degree program in Biomedical Engineering Technology be discontinued because of marginal enrollment, the Advisory Board's preference for the A.S. degree, and the expense of correcting equipment deficiencies. This recommendation was implemented and no enrollments were accepted into this program after April, 1985. The A.S. degree program in Biomedical Engineering Technology was retained. The Committee also recommended that the Solar Engineering Technology program be discontinued, primarily because of declining enrollments as a result of decreasing support of the solar energy industry by the Federal government. This recommendation was also implemented, and no further enrollments have been accepted in the Solar program after January, 1986.

During 1985, increased emphasis was placed on recruitment and a Recruitment Task Force was formed. However, enrollments and the college census continued to decline throughout 1985. This decline made it increasingly difficult for the college to service the existing debt and at the same time provide the financial resources to make the required improvements in equipment, salaries, and facility.

In the Fall Quarter of 1985, President Sullivan decided to initiate an executive search for a new President with the proven experience in organizational management and development, and

marketing and recruitment, that would be necessary to reverse the situation.

On March 1, 1986, David D. O'Donnell was appointed as President of Colorado Technical College. He came to the position with extensive experience in the field of proprietary education. In his previous employment with ITT Educational Services, Inc., he had served as Director of Advertising, Director of Marketing and Public Relations, Vice President and General Manager of a subsidiary corporation of ITT Educational Services, Inc. Marilyn Sullivan remained with the College as Vice President of Industrial Relations and Director of Placement.

On March 25, 1986, Coy D. Ritchie was appointed as Vice President of Academic Affairs/Dean, replacing Dr. William C. McPeek. Dean Ritchie has many years experience as a technologist, vocational instructor and educational administrator. His academic qualifications include an A.S. degree in Electronic Technology, a B.S. degree in Industrial Management and an M.B.A. In his previous employment with ITT Educational Services, Dean Ritchie had served as Dean of Education, Center Director, and Area Manager. Dr. McPeek remained with the College and is currently Registrar and Associate Dean of the Industrial Management Department.

In March, 1986, the College's long term debt was restructured in order to provide the funds to satisfy short term requirements, acquire replacement training equipment and acquire additional capital equipment. Basically, the equity in the buildings and property was exchanged to satisfy a large long term debt that was owed by the College. The College then leased back the facilities for five years with an option to renew. Additional financial support, including a line of credit, was obtained from a local bank. This provided the funds for the

purchase of new training equipment as well as funds to meet the cyclical cash flow requirements so common to a private college.

During the two week break between the Winter and Spring, 1986 quarters, all the old tablet arm chairs and other furniture in the lecture rooms were replaced with new furniture. The new furniture consisted of tables and cushioned chairs and provided much more room for the students to use reference books and refer to schematic diagrams. Considerable house cleaning took place, and the interior of the College was completely repainted. The student lounge was expanded by fifty percent and new furniture was added. A complete vending machine facility was also installed.

Concurrent with the work on the physical plant, a major effort was undertaken to improve the morale and motivation of the staff, faculty and student body. President O'Donnell met with each group in a series of meetings and asked for their feedback on problems that existed in the College and what should be done about them. He also asked for their support. The President has continued this policy of meeting with the student body and faculty. He schedules at least one such meeting per quarter. President O'Donnell has also established an open door policy for all students who wish to meet with him. Additional emphasis has been placed on the activities of the Student Council, with the President meeting with the Council on a regular basis. Dr. Frank Prochaska was retained as a consultant to conduct a team building program among the staff and faculty. The results of this program were so positive that Dr. Prochaska was retained for 1987 to pursue this as an ongoing program of the College.

The feedback received from the staff, faculty and student body indicated a need for the following improvements:

1. New classroom furniture.
2. New chalkboards and overhead projectors.

3. More room and better furniture in the Student Lounge.
4. More and better training equipment in the electronics labs.
5. Provide some Computer Aided Design (CAD) stations.
6. More study area in the Library.
7. Better furniture in the staff and faculty office areas.
8. Improved pay and benefits for the staff and faculty.
9. Improved communication between the student body and administration.
10. Development of new courses/programs that will increase industry support and increase the student census.

Beginning in March, 1986, a marketing and public relations program was developed with three basic goals: to improve the image of the College in the minds of the public, to increase industry linkage and support, and to increase enrollments. The success of the program can be measured quantitatively by the fact that the number of new students starting each quarter since Spring, 1986, has exceeded the recruiting goals. In fact, they have exceeded the records for any previous quarters in the College's history. The student census at the start of the Spring, 1986 Quarter was approximately 400 students. The census for the Fall, 1986 Quarter was 550, and 614 students started in the Winter, 1987 Quarter. This figure is just 20 students below the record for the College of 634 students which was achieved in 1983. It is expected that the census for the Spring, 1987 Quarter will exceed 634.

A computerized system of budgeting and forecasting was developed and implemented in April, 1987, in order to more effectively utilize the financial resources of the College.

In April, 1986, a new B.S. degree program in Electrical Engineering was introduced. The curriculum was designed with considerable input from the local electronics industry. The courses are offered primarily during the evening hours and this has attracted a number of students who are employed full-time during the day. Many are already working in engineering positions but do not have the formal engineering degree required by certain employers. No other college in Colorado Springs is presently offering an electrical engineering degree program in the evening.

During the two week break at the end of the Spring, 1986 Quarter, more new furniture and training equipment (chalkboards and overhead projectors) were added to the classrooms. the offices in the administrative area were also refurbished and new furniture added.

At the beginning of the Summer, 1986 Quarter, a change was made in the organizational structure of the Education Department. Three associate deans were appointed who report to the Vice-President of Academic Affairs/Dean. Dr. William McPeek is Associate Dean and Chair of the Industrial Management Department. He also serves as Registrar. Dr. John Zingg is Associate Dean and Chair of the Computer Science and General Studies Department. John Harrell is Associate Dean and Chair of the Engineering and Technology Department. Previously, there had been nine heads of programs reporting directly to a single dean. The organizational change was made in order for the administration to respond more quickly and effectively to the needs of the students.

During the two week break at the end of the Summer, 1986 Quarter, a complete new microcomputer lab was established. This lab includes twenty student work stations, consisting of enhanced PC-XT high resolution color computers with mouse devices, tables and chairs, three Houston Instruments graphic

plotters, and several printers. Each station is capable of doing computer aided design work using the CADKEY software. The computers are also used for teaching word processing and computer science classes.

All the equipment, work benches and stools in the Linear Electronics Lab were replaced with new equipment and workstations. Sufficient equipment was acquired to equip fifteen separate, two-student stations. Individually lighted assembly stations were also added to the Electronics Fabrication Lab. The amount of student study area in the Library was doubled by the addition of a reference room. A small computer lab for student use was also added to the Library. A copy machine for student use was also placed there. Several faculty offices were renovated and equipped with new furniture.

The concept of special Saturday classes on Computer Aided Design was marketed directly to industry during the same two-week break period. Only twenty stations were available, and all twenty were filled with industry sponsored students for the duration of the eleven-week course.

Because of the increased student census and faculty turnover, it was necessary to hire seven new full-time faculty members for the Fall, 1986 Quarter. Six of these have earned graduate degrees in their fields and have considerable industrial experience. The one instructor hired without a graduate degree had considerable experience and a number of credits earned toward his graduate degree.

During the two week break at the end of the Fall, 1986 Quarter, two electronic white boards were purchased for classroom use. The faculty lounge was expanded, renovated and equipped with new furniture. The lighting and furniture in the Smoking Section of the Student Lounge was improved. Several

additional faculty office areas were renovated and furnished with new furniture.

However, the most significant change that took place at this time was the introduction of a much improved salary schedule and benefits program. The salaries of all employees were increased by an average of twenty-five percent. The new benefit plan includes medical, major medical, dental, optical, pharmacy and term life coverages, and a Section 401k retirement plan. A limited profit sharing plan was also introduced. The previous benefit plan included only term life coverage and a medical plan, with the employees paying half the cost of the medical plan. If an employee did not participate, then they lost the value of the company contribution. With the new plan, if an employee does not participate, the company contribution is put in that employee's 401k plan. Now, all employees actually share in the benefits.

Other benefits introduced in January, 1987, included a $200 annual allowance per employee for professional development, and a $100 annual allowance per employee for professional memberships. These benefits were primarily designed to facilitate faculty professional development; however, it was not restricted to just faculty: all employees participate equally!

Concurrent with the introduction of the new benefits plan, formal job descriptions were developed for all employees. A standardized system of pay grades was developed with provisions for annual reviews, merit increases and adjustments for cost of living. A system of goal setting for all employees is also being introduced. The work in this area is ongoing and some work still remains to be done.

A new program in Defense Systems Management was developed for introduction in the Winter, 1987 Quarter. The industry in Colorado Springs is heavily oriented toward military aerospace

contracts. Our contacts in industry indicated there was a strong need for technically educated professional managers trained in the hardware and software specifications necessary for efficient management of such contracts. A curriculum was developed in close collaboration with industry. It was decided to introduce the program by offering one course on Saturday and marketing it directly to the industries concerned. It was also decided that a class of twenty students would be sufficient to justify running the course. The first course offered was DOD Documentation Technology, and it was announced two weeks prior to the start of the quarter. The response was far beyond what had ever been expected. Fifty students registered for the class and it was necessary to schedule a second class to accommodate all the students. All of these students are professionals working in various aspects of Defense Systems Management, and they have indicated a desire to take additional courses in the field beyond the one for which they are currently registered. In the Spring, 1987 Quarter, we offered a course in Configuration Management, as well as DOD Documentation Technology . No other local College is offering any courses in this subject matter area. If the interest continues to grow and enrollments increase, the offerings may be expanded into either a certificate or a degree granting program.

During the Winter break (1987), the Prime Computer Lab and the Linear Electronics Lab were expanded and renovated. In addition, the Business Office was expanded and a new Financial Aid Office was added to the administration area. The Business Office also implemented the use of new software for payables, receivables, general ledger, payroll and employee benefit management.

A comprehensive long range plan has been developed for the College which provides for all the critical areas of the College's growth for the period 1987 to 1991. Areas addressed include capital expenditures, facilities and equipment,

organizational development, personnel, program changes, marketing and enrollment to include a 1984-1986 summary.

It is very important to note that all of the projects mentioned in this report were accomplished almost entirely with funds generated internal to the College and it was not necessary to increase the College's long term debt. In fact, the external debt has actually been reduced by more than 1½ million dollars during the past year.

This report was originally drafted during January and February, 1987. Copies of the rough draft were provided to the President, Vice President of Academic Affairs, Vice President of Industrial Relations, Associate Deans, Chief Financial Officer and the faculty in order to receive input from all persons involved in this report. A revised draft based on the recommendations received from the administration and faculty was then prepared and forwarded to President O'Donnell. Upon completion of his review, a final report was prepared and copies mailed to the North Central Association of Colleges and Schools and members of the visiting team in April, 1987.

During the two days that the evaluation team will be visiting the College, the conference room in the administrative area on the second floor will be made available to the team. This location will provide easy access to administrative personnel, faculty and files. All the documents considered pertinent to the focused evaluation will be on display in the conference room.

Chapter 2

AN EXAMINATION OF THE AREAS OF FOCUS

In May, 1984, the Review Committee directed that the 1986-1987 Focused Evaluation be focused on a) finances, particularly the ability to support staffing and equipment, and b) the institution's progress in long range planning. This section of the report will address those two areas of focus. Each area of focus will be listed. The College's progress to date in that area will then be discussed. The discussion will be followed by an assessment of the progress and discussion of plans for the future.

Area of Focus:

Finances, particularly the ability to support staffing and equipment.

Progress to Date:

The most significant element in our financial management was to properly control and structure the College's debt. In 1985, the College had approximately $1.5 million of debt. Payments were made on a monthly basis. Servicing this debt took a large share of the tuition revenue, leaving only limited funds for capital improvements, improved compensation and purchase of additional and replacement training equipment. In June, 1985, the firm, Strait, Kushinsky & Company, Certified Public Accountants, was retained to review this situation and make recommendations. Early in 1986, with the advice and assistance of this firm, the equity in the buildings and property on which the College is located was exchanged to satisfy most of the long term debt. The College then leased back the facility. From that point on, there were sufficient funds to make many of the necessary improvements in the College. Currently, the College has only approximately $169,000 in long term debt.

Another area which has significant impact on the financial situation of any college is the student census. The student census had been on a declining track since its high point in 1983. The funds which were no longer needed for debt service were directed into a general clean-up of the College and a new marketing effort. The result has been excellent progress over the past year. Since April, 1986, the student census has been steadily increasing. The number of new students starting each quarter has exceeded the number starting for the same quarter of any previous year in the history of the College. Over 600 students are currently attending. The largest enrollment in the 22-year history of the College was 634 students, and we expect to meet or exceed that figure in April, 1987. As a means of comparison, total revenue was $1,639,805 for 1984, $1,690,677 for 1985 and $1,687,226 for 1986. The budget for 1987 is $2,682,000. Current actuals, January thru April, are exceeding budgeted projections.

After reviewing the various tuition rates charged by other private colleges, and the past history of this College's tuition programs, it was felt that a tuition increase was fair, to both the student and the College. A program was introduced to fix the tuition for current students through graduation, and the tuition was then changed to $100 per quarter hour effective January, 1987, for all new students. The result thus far has been the highest number of new students in the history of the College.

To aid in forecasting and controlling expenses, the budget has been computerized. It is updated monthly to reflect the actual year-to-date progress versus the original budget figures. The updated budget is reviewed by the administration and the Board of Governors on a monthly basis. This system has proven to be an effective tool in controlling and managing expenses, and in short and long term plannning.

In regard to the financial ability of the College to support staffing, eight new faculty members were hired in 1986; seven hold graduate degrees. The College was able to hire such well qualified individuals due to positive attitudes among the employees and students at the College today. The continued strong linkage with industry assisted the College in finding qualified faculty with industrial experience. At the time of the Comprehensive Evaluation in 1984, sixty-six percent of the full-time faculty held graduate degrees. Today, 77.3 percent have earned graduate degrees.

Effective January 1, 1987, a comprehensive salary structure was introduced. The plan is composed of a pay grade for every position, formal job descriptions for each position, stated minimum requirements for each position, a salary schedule that shows the minimum salary for each pay grade, the progression in steps to the maximum salary for the pay grade, annual performance reviews which result in merit pay increases and periodic cost of living adjustments. The additional expense to be incurred in 1987 as a result of the improved salaries and benefits is $298,000 or eleven percent of total revenue. With this investment, we have made our salaries and benefits competitive with other local small private colleges.

The College began a program for team building employing Dr. Frank Prochaska throughout 1986 as facilitator for the program. Dr. Prochaska's doctorate is in human resources development, and he is a private consultant in the area of organizational development. His clients include Burger King, TRW, United Technologies, Joy Manufacturing and the Department of Defense. The team building process, as he has conducted it, has involved a number of group meetings with the employees, followed by individual meetings and discussions. He has also assisted in the development of job descriptions and the setting of individual goals. The expense of the consultant and the salaries of the employees during the team building sessions was

considered an investment in the future of the College. As a result of analyzing the team building activities, the faculty and administrative needs were further reviewed, which resulted in reorganizing and strengthening key positions in the administrative area.

1. The Business Office and financial aid staff were enhanced not only by utilizing new software, but by moving Mr. Coy Ritchie (Dean of College) to Vice President of Budget and Finance in order to better utilize his expertise in finance and management. The previous Chief Financial Officer was moved into accounting responsibilities which further strengthened the Department. A new Financial Aid Officer was added to the administrative staff to further support student needs.

2. Dr. John Zingg, Ph.D., was moved into the Dean's position to further support the direction of the College in the Computer Science and Computer Engineering areas.

3. Department Chairs were appointed:
   Biomedical and Electronic Engineering Technology - John Harrell
   Electrical Engineering/Computer Engineering - John Harrell (acting - Fall 1987). Search for Ph.D. in progress.
   Computer Science - Dr. John Zingg (acting). Search for Ph.D. in progress.
   Basic Sciences/General Studies - Dr. Jack Fannin, Ph.D.
   Industrial Management - Dr. William McPeek

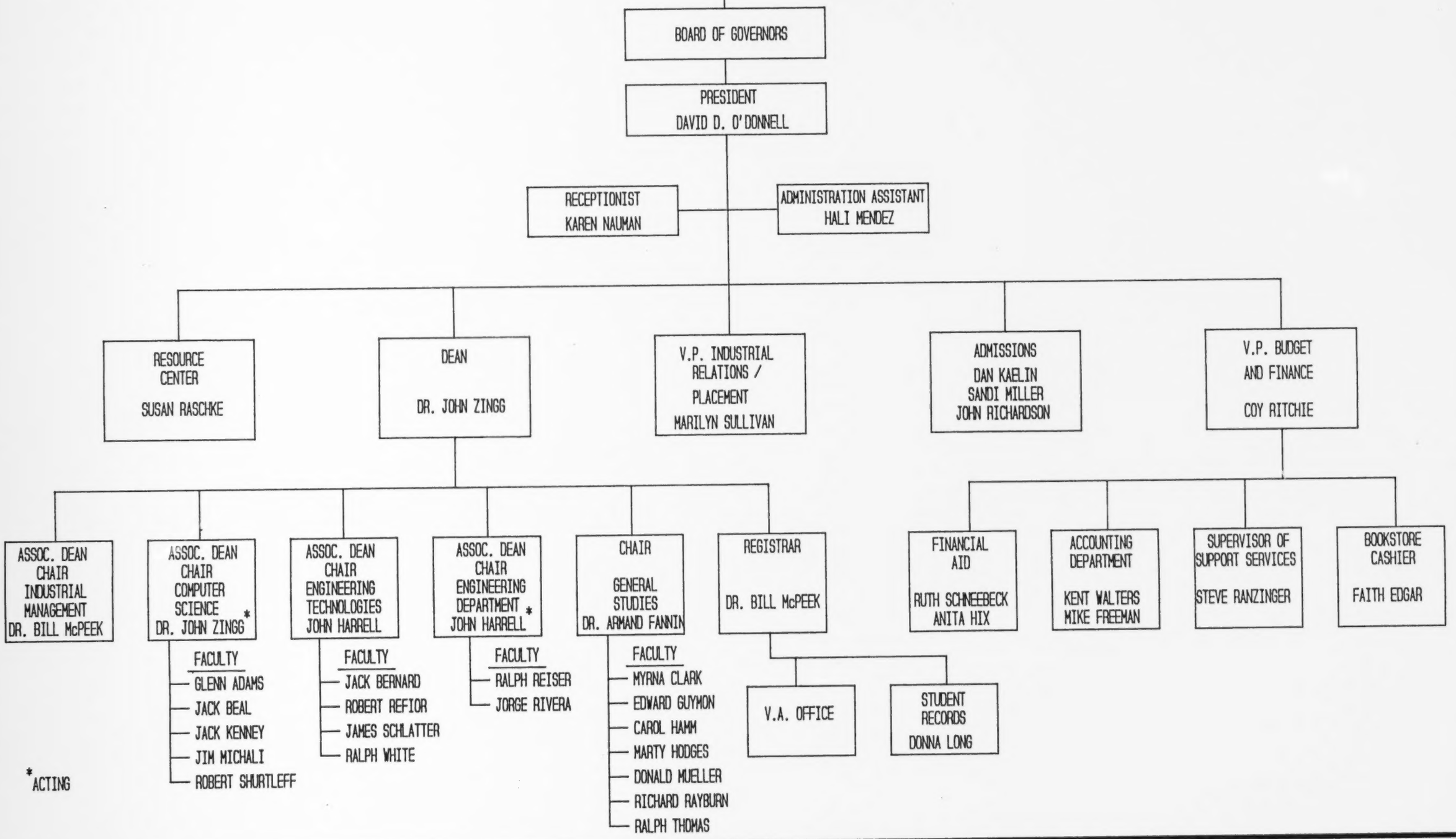
   This restructuring allows for best utilization of personnel strengths leading to a Ph.D. level in each department leadership role. This reorganization will provide the foundation for meeting the College's long term goals.

4. An organization structure for the short-term was developed and distributed. A copy of the current organization follows on page 17.

The College is working on a new organizational structure concept, and those ideas are expressed and presented in our multi-year plan.

COLORADO TECHNICAL COLLEGE

CURRENT ORGANIZATION GRAPH



*ACTING

Another example of the College's ability to support staffing is the program to support professional development. Starting in January, 1987, $200 is available anually for every employee to spend on approved professional development activities. The activities selected will be a joint responsibility of the employee and the responsible supervisor. Additionally, $100 per employee has been budgeted annually for professional memberships. This will allow every employee the opportunity to be a member of the premier professional organization within their field. The total cost of this program for 1987 will be $27,600. This is considered to be an investment in the personnel assets of the College.

As a measure of our financial ability to support new and replacement equipment purchases, listed below are the facility improvements and new and replacement equipment purchases for the years 1984, 1985, 1986 and 1987.

1984 Equipment Acquisitions and Facility Improvements

1. 30 Lab Volt Electronics Trainers
2. 10 Hitachi 20 MHz Oscilloscopes
3. 1 Tektronix 100 MHz Oscilloscope
4. 3 Prime Computer Terminals Added to Administrative Area
5. Replaced the Roof on the Main Building
6. Paved the Parking Lot

1985 Equipment Acquisitions and Facility Improvements

1. 10 Lab Volt Digital Electronics Trainers
2. 10 Leader 20 MHz Oscilloscopes
3. 10 Global Specialties Logic Probes
4. Painted the Exterior of Both Buildings

1986 Equipment Acquisitions and Facility Improvements

1. 15 Tektronix 60 MHz Oscilloscopes
2. 15 Sets of Leader Electronic Test Equipment
3. 15 Electronic Workstations
4. 21 IBM Compatible Microcomputers with 20 meg Hard Disks
5. 20 Sets of CADKEY Software
6. 20 Computer Workstations
7. 3 Houston Instruments Graphic Plotters
8. 4 Overhead Projectors
9. 2 Electronic Whiteboards
10. New Classroom Furniture for all Lecture Rooms
11. Established a New and Much Larger Microcomputer CAD Lab
12. Increased Library Size 50% and Doubled the Study Area
13. Added a Microcomputer Lab to the Library
14. Repainted the Interior of Both Buildings
15. New Furniture for Administrative and Faculty Offices
16. Renovated and Increased Size of Faculty Lounge, to Include New Appliances
17. New Furniture for Student Lounge
18. Increased Size of Student Lounge

1987 Equipment Acquisitions and Facility Improvements

1. New Financial Aid PC and Software
2. Business Office PC and Software
3. Wordprocessor/Typewriters
4. 24 Computer Desks and Computer Arms
5. 6 More Qume Terminals
6. 24 Electronic Lab Benches/Stools, also in Electronic Digital Lab
7. New Stools in Physics Lab
8. New Desks for Administration and Faculty
9. Enhanced Copier (Leased)

The following amounts were spent for facility improvements and new and replacement equipment: $110,922 in 1984, $72,762 in 1985, $199,898 in 1986, and $100,000 is budgeted for 1987.

Assessment of Progress:

The College has completely renovated its facility, purchased considerable new and replacement training equipment, added a new microcomputer lab, increased the library size, added a Computer Aided Design (CAD) capability, increased salaries by twenty-five percent, added a comprehensive employee benefit plan, upgraded the educational level of its faculty, and at the same time reduced its long term debt from $1,500,000 to $169,000. We are confident that the College has demonstrated the financial ability to support staffing and equipment requirements in the future.

Area of Focus:

The institution's progress in long range planning.

The Executive Committee, composed of the President, Vice-President of Budget and Finance, Vice-President of Industrial Relations, Dean, the Associate Deans, and Registrar, have been tasked with the main responsibility for long range planning. In addition, all employees and the student body have also been involved. By the make up of the Executive Committee, all administrative personnel and academic departments are represented, which allows for two-way communication throughout the College. Student input has come through the President's meetings with the student body and the Student Council. Quarterly student feedback forms have also provided input.

Shortly after President O'Donnell assumed his position in March, 1986, an interim one-year plan was developed to coordinate the activities of the College for 1986. The main focus was to improve the financial condition and make the improvements necessary to address the other areas of concern

CAPITAL EXPENDITURES	$110,922
FACILITIES AND EQUIPMENT	PURCHASED: 30 LAB VOLT TRAINERS 10 O-SCOPES 1 TEK 465 O-SCOPE -EXPANDED AND REPAVED PARKING LOT -REPLACED ROOF
ORGANIZATIONAL DEVELOPMENT	
PERSONNEL	-SALARY INCREASED
PROGRAM CHANGES	-EVALUATED BS BMET LONGEVITY -EXAMINED AS MET PROGRAM -EXAMINED AS/BS SET PROGRAM -EXAMINED OPTIONS FOR OTHER PROGRAMS -FORMED ADVISORY BOARD FOR BS IM PROGRAM
MARKETING	-RADIO/NEWSPAPER MEDIA PROGRAM - INTERNAL PERSONNEL

ENROLLMENT

	NEW	TOTAL ENROLLMENT
WINTER	74	572
SPRING	52	542
SUMMER	46	343
FALL	162	599

TOTAL NEW = 334

CAPITAL EXPENDITURES	$199.898
FACILITIES AND EQUIPMENT	PURCHASED: CLASSROOM FURNITURE (8 ROOMS) TRAINING EQUIPMENT - CLASSROOM 20 NEW PCS/SOFTWARE/PLOTTERS ELECTRONIC EQUIPMENT NEW LAB FURNITURE (BENCHES/STOOLS) ADMINISTRATIVE FURNITURE ADMINISTRATIVE CARPET FACULTY FURNITURE BUILDING & STREET SIGN FINANCIAL AID COMPUTER SOFTWARE -NEW BUILDING LEASE -INSTALLED NEW 20-STATION CAD LAB - HARDWARE/SOFTWARE/PLOTTERS -NEW FACULTY OFFICES -NEW ADMINISTRATIVE OFFICES -REMODELED 2 LARGER ELECTRONIC LABS -INSTALLED LARGER STUDENT LOUNGE - SMOKING AREA -DEVELOPED LARGER LIBRARY - PC EXPANSION - STUDY SPACE - CARPET -EXPANDED STUDY AREAS -EXPANDED BOOKSTORE SPACE -EXTENSIVE INTERIOR PAINTING -REMODELED ENLARGED FACULTY LOUNGE
ORGANIZATIONAL DEVELOPMENT	-NEW MANAGEMENT (PRESIDENT, DEAN) -CONSOLIDATION OF ACADEMIC CHAIRS -ADD NEW ADMISSIONS STAFF -ENLARGED BOARD OF GOVERNORS FROM 9 TO 13 -COMPUTERIZED ATTRITION EVALUATION DATA
PERSONNEL	-SALARY INCREASE 5% - APRIL -TEAM BUILDING BEGINS -REORGANIZED STUDENT COUNCIL -MBO DEVELOPMENT -DEVELOP SALARY INCREASES/PAY GRADES/JOB DESCRIPTIONS -INCREASED QUALIFICATIONS FOR FACULTY HIRES -REVISED COLLEGE POLICIES/HANDBOOK -DEVELOP NEW BENEFIT PLAN - ALL EMPLOYEES
PROGRAM CHANGES	-IMPLEMENTED BS EE DEGREE -IMPLEMENTED INDUSTRY CAD CLASSES -DEVELOPED DOD COURSES & POTENTIAL DEGREE PROGRAM TO TEST DOD MARKET -COMMENCED BS IM PHASE OUT
MARKETING	-IMPLEMENTED NEW HS SCHOLARSHIP PROGRAM -SCREENED & SELECTED NEW ADVERTISING FIRM -CREATED & STAFFED NEW ADMISSIONS ADVISOR DEPARTMENT -ESTABLISHED PRIMARY ADI (AREA OF DOMINANT INFLUENCE - TV) AREA HS MARKET -NEW CATALOG UPGRADE -LOGO CHANGE -HIGH SCHOOL TEACHERS SEMINARS -PARTICIPATION IN COLORADO COUNCIL HS EVENTS & DIRECTORY -NEW COMMUNICATIONS PROGRAM -NEW TV ADVERTISEMENTS - ADI AREA -EXPANDED PARTICIPATION - CAREER FAIRS -DEVELOPED/IMPLEMENTED HS MARKETING PLAN -DEVELOPED/IMPLEMENTED TRADE SHOWS/CONFERENCE PROGRAM -DEVELOPED NEW GENERAL PUBLIC & IMAGE ADVERTISING PLAN -DEVELOPED NEW CREATIVE - TV
ENROLLMENT	NEW WINTER 96 SPRING 54 SUMMER 104 FALL 234 TOTAL NEW = 488 TOTAL ENROLLMENTS WINTER 477 SPRING 400 SUMMER 388 FALL 605

CAPITAL EXPENDITURES	$200,000
FACILITIES AND EQUIPMENT	PURCHASE: WORD PROCESSOR FURNITURE LAB BENCHES BUSINESS OFFICE HARDWARE/SOFTWARE ADMINISTRATIVE COMPUTER NETWORK DEVELOP BUILDOUT COST ON ADDITIONAL 18,000 SQ. FEET DEVELOP PLAN: $50 - $70K FACILITY IMPROVEMENT -EXPAND FACILITY OFFICES -ADD 70 PARKING SPACES -REMODEL NEW ELECTRONICS LAB - UPPER LEVEL -REMODEL PRIME LAB -MOVE CLASSROOMS TO 18,000 SQUARE FOOT BUILDING -ADD NEW PHYSICS/CHEMISTRY LAB AND EQUIPMENT -LEASE ENHANCED COPIER
ORGANIZATIONAL DEVELOPMENT	-DEVELOPED COLLEGE PHILOSOPHICAL MODEL -ADD EE CHAIR -PREPARE FOR TAC/ABET -REDUCE TURNOVER -ESTABLISH NEW ORGANIZATIONAL STRUCTURE (SEE ORGANIZATION CHART) -COMPLETE BOARD OF GOVERNORS SELECTIONS -REVISE ALL POLICIES/PROCEDURES FOR NEW OPERATIONS HANDBOOK -REVISE FACULTY/EMPLOYEE/STUDENT HANDBOOK -BEGIN NEW COMPUTERIZED ADMINISTRATIVE MANAGEMENT PROGRAM -REFINE COMPUTERIZED ATTRITION DATA EVALUATION
PERSONNEL	-FACULTY GRADUATE DEGREES = 77.3% -DOCTORAL LEVEL = 13.6% -IMPLEMENT NEW BENEFIT PLAN (MEDICAL/DENTAL/RETIREMENT) -IMPLEMENT SALARY INCREASE/PAY GRADES/JOB DESCRIPTIONS -ESTABLISH ANNUAL MBOs -EVALUATION PLAN UPDATED -SALARY GRIDS ESTABLISHED -EXPANSION OF ACADEMIC CHAIRS -PROFESSIONAL DEVELOPMENT FUNDS INCREASE -IMPROVE ADJUNCT FACULTY ORIENTATION -ADDED PERSONNEL IN BUSINESS OFFICE -ADDED ONE FINANCIAL AID ADMINISTRATOR
PROGRAM CHANGES	-CONTINUE BS DOD EVALUATION/EXPANSION -DEVELOP BS COMPUTER ENGINEERING -ADD FORTRAN 77 - COMPILERS -ADD ADA - COMPILERS -ADD 16 BIT TRAINERS - UPPER LEVEL LAB -ADD ENGINEERING DESIGN SOFTWARE -ADD HIGH SCHOOL TEACHERS SEMINARS -COMPLETE PPCC TRANSFER AGREEMENT -EXPAND 2-YEAR COLLEGE TRANSFER AGREEMENTS
MARKETING	-REFINE HIGH SCHOOL PLAN - KEEP SAME ADI AREA - HS MARKET -CONTINUE HIGH SCHOOL TEACHER SEMINARS -EXPANDED TRANSFER - 2-YEAR COLLEGES -PARTICIPATION - CAREER FAIRS -SCHOLASTIC INCENTIVE AWARD PROGRAM -NEW 2-YEAR CATALOG -CREATED NEW CREATIVE ADVERTISING & PRINT PROGRAM -DEVELOP & IMPLEMENT IDENTITY PROGRAM -DEVELOP & IMPLEMENT TRANSFER OF 2-YEAR ACC. COLLEGES -EXPAND ADMISSIONS ADVISOR DEPARTMENT
ENROLLMENT	NEW WINTER 137 SPRING 200 SUMMER 125 FALL 235 TOTAL NEW = 687 TOTAL ENROLLMENT WINTER 622 SPRING 600 SUMMER 563 FALL 950

CAPITAL EXPENDITURES	$150,000
FACILITIES AND EQUIPMENT	-Complete Remodeling Old Building -Add New PC Lab - 24 Stations -Renovate Remaining Old Building - Lounges, 2-3 Classrooms, Labs
ORGANIZATIONAL DEVELOPMENT	-Form New Advisory Board for EE -Implement New Organization Model -Develop Operations Handbook -Further Support Professional Development for Chairs, to Include: 1) Communication with Faculty Improvement 2) Creative Management Techniques 3) Executive Management Principles -Prepare and Have ABET Evaluation -Begin Preparation for Comprehensive NCA Visit - Self-Study Data Collection -Implement Computerized Administrative Management Area -Refine and Update Multi-Year Plan
PERSONNEL	-Salaries - Upgrade -Budget 150% Professional Development Increase -Develop Profit Sharing Plan -Upgrade Faculty Education - Promote Degrees -Continue Adjunct Faculty Orientation -Refine Salary Grades -Continue Annual MBOs
PROGRAM CHANGES	-Evaluate MS CS Degree - Start Fall of 1988 -Evaluate New Course Options -Implement New Courses Options - Start 3 New Lasers, HVAC Controls, Robotics, Microwave, Fiber Optics, and Space Communications -Continue High School Teacher Seminars -Refvaluate All General Studies - Emphasis on Implementing Application of Technology
MARKETING	-Expand ADI Marketing Area to All Colorado -Staff Full-Time High School Adm. Rep. -Develop Addendum to Catalog

ENROLLMENT	New	Total Enrollment
	Winter 145	Winter 924
	Spring 141	Spring 924
	Summer 125	Summer 703
	Fall 277	Fall 1131
	Total New = 688	

CAPITAL EXPENDITURES	$150.000
FACILITIES AND EQUIPMENT	-Complete Evaluation of Facility - Lease or Own -Land Search Site -Building Plan (Option on Existing Buildings) -Develop Architectural Plan
ORGANIZATIONAL DEVELOPMENT	-Continue Preparation for NCA - Self-Study Analysis -Survey Students/Faculty for Building Plan Input -NCA Visit -Refine Computer Administration Management -Refine and Update Multi-Year Plan
PERSONNEL	-Upgrade Salaries -Implement Profit Sharing Plan -Continue Annual MBOs
PROGRAM CHANGES	-Evaluate MS Programs in CE & EE for Implementation in New Facility -High Level Certificate - Evaluate Market - Sensitive to Local Area -Continue Evaluation of New Courses - Implement 3 New -Continue Evaluation - Upgrade of General Studies -Evaluate Educational Programs - Assist & Establish Facility Layout and Equipment for Building Plans = Maximize Tech. Application in Classroom
MARKETING	-Refine and Develop Colorado High School Marketing Program -Develop New 2-Year Catalog

ENROLLMENT	New	Total Enrollment
	Winter 168	Winter 1057
	Spring 165	Spring 1169
	Summer 135	Summer 812
	Fall 330	Fall 1246
	Total New = 798	

CAPITAL EXPENDITURES	$150,000
FACILITIES AND EQUIPMENT	-Commence Final Building Plans -Finalize Plans - Build Internal Space or Renovate
ORGANIZATIONAL DEVELOPMENT	-Refine and Update Multi-Year Plan
PERSONNEL	-Increase Salaries -Profit Sharing -Continue Annual MBOs
PROGRAM CHANGES	-Continue Evaluation - Implement 3 New Courses -Continue Evaluation - Upgrade of General Studies
MARKETING	-Fall - Expand HS Marketing to 5 States Area (WY, NM, KA, UT, and AZ) -Develop Addendum to Catalog

ENROLLMENT

New		Total Enrollment	
Winter	181	Winter	1331
Spring	179	Spring	1255
Summer	135	Summer	865
Fall	383	Fall	1394

Total New = 878

CAPITAL EXPENDITURES	$250.000
FACILITIES AND EQUIPMENT	-Move to New Facility - Summer Quarter
ORGANIZATIONAL DEVELOPMENT	-Update and Refine Multi-Year Plan
PERSONNEL	-Continue Upgrade and Evaluation of All Faculty -Continue Annual MBOs
PROGRAM CHANGES	-Modify and Refine Entire Educational Programs as Required to Provide Maximum Quality Education in New Facility
MARKETING	-Refine and Develop 5 State Marketing -Full Implementation of Plan -Develop New Catalog with Facility Change

ENROLLMENT

	New	Total Enrollment
Winter	200	1400
Spring	180	1400
Summer	150	900
Fall	425	1575

Total New = 955

Assessment of Progress 1986:

Every major goal in the 1986 Interim Plan was accomplished on schedule and almost completely with financial resources generated internal to the College. Achievement of these goals has corrected the concerns voiced by the employees and the student body. Achieving these goals has also addressed the five areas of concern listed by the 1984 evaluation team. The College is confident that it has demonstrated the ability to do long range planning and then manage to the plan.

Future Plans Summary:

Approximately $1,000,000 of capital funds have been allocated in our multi-year plan to assure continued upgrade and addition of new labs, equipment, and facilities. We will also dedicate sufficient financial resources to maintain our salaries and employee benefits at a competitive level, as well as to continue the team building and organizational development activities. Our detailed multi-year (1987-1991) plan will be available for review during the NCA Focused Visit.

CHAPTER 3

A SUMMARY ASSESSMENT OF THE AREA OF FOCUS

The Review Committee, in May, 1984, directed that the 1986-1987 Focused Evaluation be focused on the following areas: (1) finances, particularly the ability to support staffing and equipment; and (2) the institution's progress in long range planning.

In the area of finances, these actions have been accomplished:

1. The College's long term debt was reduced by 1.43 million. All actions accomplished were completed with internally generated funds.

2. By increasing enrollments and tuition, the revenue base has been improved from $1,639,805 in 1984 to $1,687,226 in 1986, with a budget for $2,682,000 in 1987. This action has provided the College with funds for further growth and improvement.

3. The financial budget was computerized to allow for more frequent reviewing and updating. This has substantially improved the ability to control all financial resources.

4. A dramatically improved salary and benefits plan was implemented in January, 1987. The plan included a provision for funding professional development activities of all employees. The College's ability to retain its present faculty and recruit additional faculty has tremendously improved.

5. Over the past three years, the majority of the laboratory and training equipment has been replaced with new equipment. The library has been expanded, and a microcomputer room and reference room were added. All the furniture in the

classrooms, faculty offices and administrative offices has been replaced with new furniture. The interior of the College has been completely renovated. A new microcomputer lab with computer aided design capabilities was established.

6. A program of the team building for all employees was initiated, and a highly qualified consultant was hired to direct the program.

The combination of these activities has created an atmosphere of dramatically improved morale and cooperation among the faculty, administration and student body. The dedication level of all employees to serve the needs of the students has improved to a truly impressive level.

The College is stable financially and we are confident that the College has demonstrated the financial ability to support staffing and replacement of equipment in future years.

In the area of long range planning, an Executive Committee was formed, composed of the President, Vice-President of Budget and Finance, Vice-President of Industrial Relations, Dean, Associate Deans, and Registrar. This committee, which provides representation for all integral groups within the College, was given primary responsibility for long range planning. An interim one-year plan was developed for 1986 that addressed the five concerns listed by the 1984 evaluation team, as well as the concerns expressed by the employees and student body. The goals of this plan were to increase the financial resources, ensure that no marginal academic programs existed, reduce faculty turnover, emphasize faculty professional development, upgrade the quality of the faculty, improve the condition of the facility, and provide additional and replacement training equipment. This interim plan was then expanded into a five-year plan which includes the period from 1987 through 1991.

As a result of this planning, the following major actions have occurred:

1. The College has addressed all of the 1984 Comprehensive Visit concerns, along with the focused evaluation concerns.

2. The financial resources of the College are considerably improved, with plans and controls in place to further improve the financial status in the future.

3. The B.S. degree program in Biomedical Engineering Technology and the A.S. and B.S. degree programs in Solar Engineering Technology have been phased out. A new B.S. degree program in Electrical Engineering was implemented. The status of all remaining programs is reviewed by the Executive Committee on a quarterly basis to ensure that there are no marginal academic programs in the College.

4. A plan was developed and implemented that would provide the financial resources for the professional development activities of all employees. This plan provides $200 per employee annually for professional development activities and $100 annually for membership in professional associations.

5. A plan was developed for upgrading faculty qualifications which includes job descriptions with stated minimum requirements for both education and experience (both teaching and industrial experience are required), a policy requiring a minimum of an earned master's degree for all new faculty, and a comprehensive program of instructor evaluations and student feedback.

6. A plan was developed to renovate the facility utilizing the two-week breaks between academic quarters for construction activities. This plan has resulted in the

renovation of almost all of the facility and the replacement of the majority of the furniture and fixtures.

7. A plan was developed to replace all marginal training equipment and increase the amount of training equipment where necessary. This has resulted in bringing the majority of the classroom and lab equipment up to our required professional level. Funds have been allocated in the five-year plan to ensure that this program is continued.

Conclusions/Requests:

1. The College has taken the necessary steps to turn around the financial base and develop a long range plan that is realistic and attainable.

2. The enrollment decline has stopped; enrollments have actually increased to a record breaking point in April, 1987.

3. The foundation for the College, the management team, personnel, and financial base are in place to meet the long range plan.

4. The College requests that the focused visiting team recommend to the Commission that the areas of concern have been resolved, not only for the focused evaluation concerns, but for all of the 1984 comprehensive visit concerns.

5. The College is confident that all of the 1984 concerns have been addressed. The College would like to ask the visiting team to recommend to the Commission that the Statement of Affiliation Status be modified to indicate a comprehensive evaluation in 1992-1993. Additional rationale includes the fact that the institution will be preparing for an ABET evaluation during the 1988-1989 time period.

6. The College requests the visiting team recommend to the Commission that the Statement of Affiliation Status be modified to include a Master of Science Degree program in Computer Science. Actual implementation of the long range plan will require this change.

7. The College requests the visiting team recommend to the Commission that the Statement of Affiliation Status be modified to include a high level certificate or B.S. degree program in Defense Systems Management to meet the needs of local constituents outside the regular degree programs. All materials will be made available for the visiting team to include:

1. Course descriptions
2. Vitae of faculty
3. Course syllabi
4. Clientele to be served
5. Educational resources available for students

DATA FORM C

NCA

10

Name and Location of Institution

COLORADO TECHNICAL COLLEGE

DATA FORM C

COLORADO SPRINGS, CO 80907

INSTRUCTIONAL STAFF AND FACULTY
NUMBER, DEGREE, AND SALARY
(Report for this campus only)

Include only personnel with professional status who are primarily assigned to RESIDENT INSTRUCTION, AND DEPARTMENTAL OR ORGANIZED RESEARCH. Exclude all non-professional personnel and those professional personnel whose primary function is NOT resident instruction, departmental research or organized reseach.

	Number full-time	Number part-time	FULL-TIME FACULTY & STAFF — HIGHEST DEGREE EARNED							FULL-TIME SALARY		
											RANGE	
			Diploma, Certificate, or none	Associate	Bachelor's	1st Professional	Master's	Specialist	Doctoral	Mean (Actual)	HIGH	LOW
Professor	4	4					1		3	29,563	32,200	22,300
Assoc. Professor	13	13					13			23,027	29,300	20,400
Asst. Professor	4	10			4					21,288	26,600	18,800
Instructor	1	7			1					15,300	22,600	15,300
Teaching assts. & other teaching pers.	0	0								0		
Research staff & research assts.	0	0								0		
Undesignated rank	0	0								0		
Number of instructional staff added for current academic year (A8-86-87)	8		0	0	2	0	5	0	1			
Number of instructional staff employed in previous academic year, but not reemployed for current academic year	10		0	0	3	0	5	1	1			

DATA FORM D

Name and Location of Institution

Colorado Technical College

Colorado Springs, CO 80907

DATA FORM D

INCOME AND EXPENDITURES
(Report for this campus only)

This report should cover the last completed fiscal year. An institution which closes its books at some date other than June 30 should use its own fiscal period and state the date of closing its books. Where the fiscal year ends on September 30 or later, use the previous fiscal year.

Accounts kept in conformity with the recommendations of the National Committee on the Preparation of the Manual of College and University Business Administration will lend themselves readily to the completion of this report.

Fill in each item in the report form, using zero where there is nothing to report. Please give totals for checking purposes.

Enter figures to the nearest dollar.

An institution maintaining separate corporations for the management of service enterprises (dormitories, bookstores, athletics, etc.) or for other purposes should include the operations of such corporations in this report.

Indicate by check mark whether:

1. Income is reported on cash basis _____ or accrual basis __x__.

2. Expenditures are reported on cash basis _____ or accrual basis __x__.

(Cash basis: Items are reported as income and as expenditures only when cash is received or made available to the institution and when it is paid out.
Accrual basis: Income is taken into the accounts as it becomes due the institution or when a bill is rendered; expenditures are taken into the accounts when obligations are incurred.)

Data Form D follows the format developed by the United States Office of Education, which the institution will use in completion of the HEGIS report.

As an alternative, a comparable financial report may be submitted.

Name and Location of Institution
Colorado Technical College
Colorado Springs, CO 80907

DATA FORM D - PART 1

CURRENT FUNDS REVENUE BY SOURCE
LAST COMPLETED FISCAL YEAR AND PREVIOUS TWO YEARS

The Fiscal Year Runs From January 1 to December 31. SOURCE	AMOUNT		
	1984 -	1985 -	1986 -
A. EDUCATION AND GENERAL (Sum of lines 1,2,3,4,5, 6,7,8,9,10 & 11)	1,437,257	1,368,938	1,330,765
1. Student Tuition and Fees	1,413,171	1,368,938	1,330,765
Percent of Total Educational and General	98%	100%	100%
2. Governmental Appropriations (Sum of lines 2, a,b,c)	-0-	-0-	-0-
Percent of Total Educational and General	-0-	-0-	-0-
a. Federal Government			
b. State Government			
c. Local Government			
3. Endowment Income	-0-	-0-	-0-
Percent of Total Educational and General			
4. Private Gifts	-0-	-0-	-0-
Percent of Total Educational and General			
5. Sponsored Research (Sum of lines 5, a thru e)	-0-	-0-	-0-
a. Federally funded Research and Develop. Centers			
b. Other Federal Government			
c. State Government			
d. Local Government			
e. Nongovernmental			
6. Other Separately Budgeted Research	-0-	-0-	-0-
Percent of Total Educational and General			
7. Other Sponsored Programs (Sum of lines 7, a thru d)	24,086	-0-	-0-
Percent of Total Educational and General			
a. Federal Government			

NCA 13 Name and Location of Institution

Colorado Technical College

DATA FORM D - PART 1 Colorado Springs, CO 80907

CURRENT FUNDS REVENUE BY SOURCE (cont.)

SOURCE	AMOUNT		
	19 84 -	19 85 -	19 86 -
b. State Government			
c. Local Government	24,086		
d. Nongovernmental			
8. Hospitals - Public Service Only	-0-	-0-	-0-
Percent of Total Educational and General	-0-	-0-	-0-
9. Other Organized Activities of Educational Depts.	-0-	-0-	-0-
Percent of Total Educational and General	-0-	-0-	-0-
10. Sales and Services of Educational Departments	-0-	-0-	-0-
Percent of Total Educational and General	-0-	-0-	-0-
11. Other Educational and General	-0-	-0-	-0-
Percent of Total Educational and General	-0-	-0-	-0-
B. STUDENT AID (Sum of lines 1 thru 6)	$129,035	188,766	240,147
Percent of Total Current Funds Revenue	7.7%	11.2%	14.2%
1. Federal Government	116,698	129,495	173,224
2. State Government	12,337	59,271	66,923
3. Local Government	-0-	-0-	-0-
4. Private Gifts and Grants	-0-	-0-	-0-
5. Endowment Income	-0-	-0-	-0-
6. Other	-0-	-0-	-0-
C. AUXILIARY ENTERPRISES (Sum of lines 1,2 & 3)	118,261	131,981	116,314
Percent of Total Current Funds Revenue	7.2%	7.8%	6.9%
1. Housing	-0-	-0-	-0-
2. Food Services	-0-	-0-	-0-
3. Other Auxiliary Enterprises	118,261	131,981	116,314
D. TOTAL CURRENT-FUNDS REVENUE (Sum of items A,B & C)	1,684,553	1,689,685	1,687,226

Name and Location of Institution

Colorado Technical College
Colorado Springs, CO 80907

DATA FORM D - PART 2

CURRENT-FUNDS EXPENDITURES BY FUNCTION
LAST COMPLETED FISCAL YEAR AND PREVIOUS TWO YEARS

SOURCE	AMOUNT		
	19 84 -	19 85 -	19 86 -
A. TOTAL EDUCATIONAL AND GENERAL (Sum of lines 1 thru 9)	1,605,117	1,739,833	1,492,334
1. Instruction and Departmental Research	646,635	711,091	717,818
Percent of Total Educational and General			
2. Extension and Public Service	-0-	-0-	-0-
Percent of Total Educational and General			
3. Libraries	19,710	20,773	20,947
Percent of Total Educational and General			
4. Physical Plant Maintenance and Operation	322,452	305,374	323,500
Percent of Total Educational and General			
5. General Administration, General Institutional Expense, and Student Services	616,320	702,595	430,069
Percent of Total Educational and General			
6. Organized Activities Relating To Educational Depts.	-0-	-0-	-0-
Percent of Total Educational and General			
7. Organized (sponsored and other separately budgeted) Research	-0-	-0-	-0-
Percent of Total Educational and General			
8. Other Sponsored Programs	-0-	-0-	-0-
Percent of Total Educational and General			
9. All Other Educational and General	-0-	-0-	-0-
Percent of Total Educational and General			
B. TOTAL STUDENT AID	44,748	53,965	59,022
C. TOTAL AUXILIARY ENTERPRISES (Sum of lines 1,2 & 3)	80,448	101,001	95,898
1. Housing	-0-	-0-	-0-
2. Food Services	-0-	-0-	-0-
3. Other Auxiliary Enterprises	80,448	101,001	95,898
D. CURRENT FUNDS EXPENDED FOR PHYSICAL PLANTS ASSETS NOT INCLUDED ABOVE			
E. TOTAL CURRENT-FUNDS EXPENDITURES (Sum of items A,B,C&D)	1,730,313	1,894,799	1,647,254

Name and Location of Institution
Colorado Technical College
Colorado Springs, CO 80907

DATA FORM D - PART 3

PHYSICAL PLANT FIXED ASSETS BY BEGINNING AND ENDING VALUES AND ADDITIONS AND DEDUCTIONS DURING FISCAL YEAR

BALANCE AND TRANSACTION	TYPE OF ASSET				
	LAND	IMPROVE-MENTS	BUILDINGS	EQUIPMENT	TOTAL
1. BOOK VALUE OF PLANT FIXED ASSETS AT BEGINNING OF FISCAL YEAR	60,000	30,681	715,000	202,447	1,008,128
2. ADDITIONS TO PLANT FIXED ASSETS DURING YEAR (Sum of lines 2,A-D)	-0-	27,176	-0-	155,082	182,258
A. By Expenditures		27,176		155,082	182,258
B. By Gift-In-Kind from Donor					
C. By Reappraisal of Plant Value					
D. By Other Additions					
3. DEDUCTION FROM PLANT FIXED ASSETS DURING THE YEAR	60,000	10,664	715,000	69,392	855,056
4. BOOK VALUE OF PLANT FIXED ASSETS AT END OF FISCAL YEAR	-0-	47,193	-0-	288,137	335,330

Name and Location of Institution

Colorado Technical College
Colorado Springs, CO 80907

DATA FORM D - PART 4

INSTITUTIONAL INDEBTEDNESS

Amount of indebtedness at the end of each of the last five fiscal years. Exclude annuity contracts for which the institution maintains an adequate reserve. Exclude short-term debt incurred in anticipation of accrued income which permits liquidation of the debt within the subsequent financial year. (Indicate indebtedness which is self-liquidating.)

	TOTAL AMOUNT OF DEBT TO OUTSIDE PARTIES		PLAN FOR LIQUIDATING DEBT
	For Capital Outlay	For Operations	For Operations
19 86 -	7,947 Leases	$177,767	$177,767 to be repaid in monthly installments by March 1991.
19 85 -	739,686 Mortgage 729,555 Note $10,033 Leases	$64,560	$64,560 to be paid in monthly installments by June 1988.
19 84 -	801,376 Mortgage 746,560 Note $18,662 Leases	$110,507	$110,507 to be paid in monthly installments by June 1988.
19 83 -	$16,344 Bank Loan $ 4,853 Leases	$92,357	$92,357 to be paid in monthly installments by March 1986.
19 82 -	$8,078 Leases	$122,126	To be paid in monthly installments by March 1986.

ITEMS AVAILABLE
AND
DISPLAYED FOR REVIEW

ITEMS AVAILABLE AND DISPLAYED FOR REVIEW

The following list of information will be provided for review during the NCA Focused Visit. If additional information will be required, the College will also make that available during the Focused Visit.

A. 5-YEAR MULTI-YEAR PLAN
   - 1987-1991

B. FINANCIAL STATEMENTS
   - 1984
   - 1985
   - 1986

C. FINANCIAL AID 1985/1986 AUDIT

D. ORGANIZATIONAL ISSUES
   - Organization Chart
   - Job Descriptions
   - MBO Program
   - Compensation Schedules 1987 & 1988
   - Benefit Plans
   - Professional Development Program

E. BOARD OF GOVERNORS MINUTES

F. EXECUTIVE COMMITTEE MINUTES

G. ENROLLMENT TRENDS 1982-1991

H. DEFENSE SYSTEMS MANAGEMENT MATERIALS
   1. Course Descriptions
   2. Vitae of Faculty
   3. Course Syllabi
   4. Clientele to be Served
   5. Educational Resources Available for Students

AGENDA ISSUES

AGENDA ISSUES

1. **Request for hotel reservations May 17/18; have hotel forward confirmation.**

   Reservations have been made; verbal confirmation received; hotel committed to forward to you written confirmation.

   Hilton Hotel
   505 Popes Bluff Trail
   Colorado Springs, CO 80907
   (303) 598-7656

2. **Request that we have the Board of Governors meet for dinner Monday evening, May 18, and adjourn to a private meeting at dinner's conclusion.**

   We have confirmed attendance with all but one Board of Governor member. The member we have not confirmed with has recently been hospitalized and we are uncertain as to his present status.

   The Hungry Farmer Restaurant
   575 Garden of the Gods Road
   Colorado Springs, CO 80907
   6:30 P.M.

   At the conclusion of dinner, we will adjourn to the College's Board Room for the private meeting. Confirmed Board Members include:

   David O'Donnell
   President
   Colorado Technical College

   Marilyn Sullivan
   Vice President Industrial Relations
   Colorado Technical College

   Coy Ritchie
   Vice President Budget and Finance
   Colorado Technical College

   Brenda Palmgren
   Partner
   Strait Kushinsky & Co.

   Bill Haller
   Managing Partner
   Strait Kushinsky & Co.

Ernie Johnson
President
Stanford Computer Works

Stephen Laine
President
United Bank of Garden of the Gods

Greg Mitchell
Vice President
Media Security, Inc.

Wanda Reaves
Executive Vice President
Chamber of Commerce

Dr. Ralph Schauer
Vice President of CAD
Ford MicroElectronics

John Gilbert, owner/manager of KOAA TV, recently hospitalized; no confirmation at this point in time.

3. **Request that we have at least one representative from each of the College's Advisory Boards to be present Monday afternoon, May 18, for a meeting with the Evaluation Team.**

Our Chairs have contacted members from each of our Advisory Boards, and we have received confirmation from one member of each Board to be available for the Monday afternoon, May 18, meeting. We are not sure if you want this meeting on an individual basis or a collective basis; we, therefore, request your guidance on this issue. Members of our Advisory Boards who will be available are as follows:

Computer Science Advisory Board Representative

Frenchy Fortin
System Engineering Manager
GEO Dynamics
Suite 230
5450 Tech Center Drive
Colorado Springs, CO 80919

Biomedical Advisory Board Representative

Russ Kleiner
Technical Services Manager
Sisters of Charity Health Care Systems, Inc.
110 Talamine Court
Colorado Springs, CO 80907

EE/EET Advisory Board Representative

Harry Gower
Principal Engineer
Digital Equipment
301 Rockrimmon Blvd
Colorado Springs, CO 80919

Industrial Management Advisory Board Representative

Dr. Frank Prochaska
President
ProSystems, Inc.
121 East Pikes Peak Avenue
Suite 343
Colorado Springs, CO 80903

* Dr. Frank Prochaska is also our consultant in organizational development and team building.

OFFICIAL RESPONSES

OFFICIAL RESPONSE

July, 1987

GENERAL COMMENTS:

We found the report, as a whole, extremely fair and supportive, with a great deal of guidance for the College. The team's insight provided the College with additional clarity in refining its long range plans and meeting its immediate objectives. As a result of the team's visit, many initiatives have already been taken and are described in the official response following each concern.

MISSION STATEMENT REVISION:

The Colorado Tech mission statement identifies specific programs that exist at the present time. It states:

> "Colorado Technical College provides quality college level, career oriented education. The College serves the needs of industry and students by preparing qualified graduates in Biomedical Engineering, Computer Science, Electrical Engineering, Electronic Engineering Technology, and Industrial Management for employment and/or advancement in industry."

In future official College documents, we see a need to modify these specific programs as the refinements in our curriculum evolve. The College is striving to eliminate marginal programs and develop new dynamic programs based on the needs of the industry and input from constituents across the country.

It is the intent of the College to keep the same basic mission statement and to refine the stated program offerings within the mission statement. Colorado Tech would like the revised mission statement to read:

> "Colorado Technical College provides quality college level, career-oriented education. The College serves the needs of industry and students by preparing qualified graduates in Biomedical Engineering Technology, Computer Engineering, Computer Science, Defense Systems Management, Electrical Engineering, and Electronic Engineering Technology for employment and/or advancement in industry."

The new program in Computer Engineering (Appendix A) and Defense Systems Management (Appendix B) are enclosed for the record.

RESPONSE TO CONCERNS (Page 10-13)

We agree with the concerns identified by the visiting team. The College would like to go on record by commenting on additional progress made as a result of the focused visit.

Concern 1: "...second echelon of administrators (Associate Deans/supervisors) may not be fulfilling their role as managers and facilitators..." The second level administrators have initiated regular weekly meetings in which all managers have the opportunity to 1) develop their ideas and direct their progress to the Executive Committee, 2) to work on faculty development, and 3) take part in team building training. At the time of the visit, one department chair had been in his new position 3 weeks. New job descriptions were written as of January, 1987, and the impact of these changed roles was just being initiated and implemented (See job descriptions - Appendix C).

In addition to the above, one new department chair has been added to the engineering department. This Ph.D. in Electrical Engineering has industrial and teaching experience and will come on board in September, 1987. Also, an offer has been extended to a Ph.D. in computer science for the Computer Science Chair position. With the addition of these two second level administrators, the College management depth will be enhanced and provide critical support for the top level. The internal team building program, already in progress, will continue to provide additional opportunity for second level administrators to explore and expand their contributions for the College.

Concern 2: "...evidence of the level of faculty development has not been documented since 1985." Although the turn-around activities of the recent 16 months have taken priority, this concern helped the College focus on a specific ingredient necessary for the institution to grow. All faculty and staff professional development since 1985 has been documented and brought current as of this time. A new system for keeping the records current is in place and functioning (See Appendix D).

Each faculty is provided $100 annually for professional memberships. The College has committed professional development funds of $500 per individual for appropriate development activities. In addition, the College is committed to offering degree reimbursement funds for those individuals pursuing a higher degree tied into a three year commitment from the individual staff or faculty member.

Concern 3: "...lack of focus on the instructional delivery process and skills necessary to ensure effective teaching..." Colorado Tech believes this is a correct and appropriate concern which needs to be addressed. Colorado Tech is committed to a pro-active program to be developed and implemented in 1988. A three-phase program will include: 1) utilization of mentors for new faculty, 2) pre-teaching orientation for all new instructors whether experienced, full-time or adjunct faculty members, and 3) evaluation process for all instructors with emphasis on improvement methods.

Concern 4: "...it is strongly recommended that the Curriculum Committee reconvene its regular meeting schedule as soon as it is practical." Regularly scheduled curriculum meetings are now in place. All documentation is current with plans to continue in this fashion.

Concern 5: "Storage of student records is inadequate..." The College agrees with this major concern; however, the facility move in September will resolve the problem. As part of the first phase of construction, a new fire vault, which is rated to withstand a total burn down of the building, will be in place for storage of all College records (September, 1987).

Concern 6: "Faculty contact hours are high..." The College feels that the contact hours are currently manageable under the present environment. Most academic advising is handled by department chairs who teach a maximum of one course per quarter. Since courses are repeated often and each faculty member tends to teach the same sequence of courses within our narrow scope, prep time is low.

Currently, there are low numbers of students in the classes which results in an average students-per-faculty member total load of 75 students. The result is that even though the contact hours appear to be high, the overall work environment is manageable because of the reduced grading, extra help and preparation requirements. The College believes the student load per faculty member in other college environments is far greater.

As the College grows and the number of students increases toward the maximum (32 lecture and 24 lab), the average students-per-faculty member will increase and thereby add to the overall work requirement. Our plan is that during this growth phase, faculty performance and work requirements will be closely monitored to determine a correct contact-hour/student-load environment which will allow an optimum teaching, currency and professional growth objective to be realized in our applied (not research) oriented structure.

Concern 7: "...no documented activity of the Faculty Affairs Committee or Education Standards Committee since 1985-1986." The College management reorganization did not focus on the Faculty Affairs Committee due to the immediate need for the institution to deal with financial stability and long range planning. As these areas improved simultaneously, the health of the institution expanded in resolving faculty issues previously handled by the Faculty Affairs Committee. The new management's redesign of the administrative structure allows all faculty the opportunity to share their concerns with their department heads, who in turn share this information directly with the Executive Committee and the President. This weekly activity provides all faculty immediate input and attention at the highest level.

The institution's on-going team building training and the President's and Dean's open-door policy further support our position that there is no need for the Faculty Affairs Committee. It is the perception of the Administration that this Committee inhibits direct

communication with the top levels, and a College of this size with its "team" philosophy doesn't need an additional level of bureaucracy. In fact, such a Committee may counteract teambuilding and timely response to concerns.

The Educational Standards Committee does still exist; it is made up of Associate Deans and the Dean of the College. The College will continue to utilize this Committee to address issues of academic integrity, academic standards and testing and measurement issues. The Committee also serves as an appeal Committee for students involved with academic probation and academic suspension as outlined in the College catalog.

Concern 8: "The current admissions test for the EET and EE programs are locally developed basic mathematics or algebra tests..." Colorado Tech has already changed the admissions tests to the national ACT standardized examination. The College feels this change will address the team's concern for reliability and validity with appropriate norm-referenced standardized tests.

Concern 9: There is an apparent void in the communication of institutional direction to the part-time or adjunct faculty." The team's concern for adjunct faculty communication is shared by the College. Since the visitation, the College has taken steps to initiate quarterly joint meetings for all faculty (full-time and adjunct), and orientation sessions for all new hires. Thus far, the response and communication seems positive and improved.

CONCERNS (Page 15)

LONG RANGE PLANNING

Concern 1: "The new multi-year plan now must be updated yearly to reflect the multiple changes that seem to be on the horizon as identified by the Board of Trustees and Administration." The multi-year plan will be

a revolving year plan which annually is revised by dropping the previous year and adding the fifth year as the process becomes a reality. Re-evaluation will be a constant activity.

Concern 2: "Continued expansion and utilization of the computer in administrative functions is encouraged, especially in student record keeping." The College is currently evaluating a new computer system to be utilized in the administrative area which will address admissions, student records and other administrative needs. The new facility has space for a host computer area with networked computers in the administrative offices.

Concern 3: "...it is recommended that the College postpone its application of a Masters degree curriculum until that time..." The College facility expansion, the addition of a new Prime 9755 mainframe computer, the curriculum development, the library expansion, and the addition of new Ph.D. faculty all contribute to the new positioning the College is taking in the five-year plan. With this momentum, along with the local market place, which seems to be void of an applications, laboratory, real campus environment for the Masters level programs, the College wishes to keep its options open for the timing on the Masters program approval. With NCA guidance, the College wishes to pursue the appropriate NCA procedures at a point in time when we feel ready.

It is not the intent of the College to prepare for such a major addition without taking a hard look at the market needs that will help us arrive at a good business decision. There are currently nine colleges offering Masters programs in the Colorado Springs area. Two of the nine have physical campuses with support services such as libraries, full-time faculty and laboratories. Seven of the colleges are NCA accredited, of which five are only operating satellite campuses in the City with limited support services.

Note Appendix E. Colorado Tech rationale for developing a Masters program in our area of expertise is based on our ability to provide a campus environment, day and night programs, library resources, extensive computer capabilities and quality Ph.D. faculty to support the new Computer Science Masters program. The College requests we be allowed to keep the door open on this option.

APPENDIX A

COMPUTER ENGINEERING
COLORADO SPRINGS CAMPUS

Graduation Requirements:
200 Quarter Hours Credit, Bachelor of Science Degree

The Computer Engineering program is a combination of courses in electrical engineering, computer science, mathematics, physics, applied science and general academic studies providing a broad background in computer hardware and software design, systems development and applications. The emphasis of the Computer Engineering program is on developing computer systems that are useable, maintainable, modifiable and reliable. This intensive course sequence provides state-of-the-art techniques and experience in computer engineering and system development for computer application systems.

The suggested sequence of study is provided below for the student's guidance in course scheduling. The sequence will insure achievement of degree objectives in the shortest possible time, provided course prerequisites have been met. The twelve quarters contain technical and humanities electives in which the student will choose courses which best meet their interests. Because of course prerequisites, electives usually cannot be taken earlier than the quarter in which they are listed.

SUGGESTED SEQUENCE OF STUDY
FRESHMAN YEAR

FIRST QUARTER	Hrs
ENG101 COMM SKILLS I	3
ENG110 WORD PROCESSING	1
MAT201 ANALY GEOM/CALC	5
ED100 ENGR GRAPHICS	3
CS100 STRC PROG & FORTRAN	5
	17

SECOND QUARTER	Hrs
MAT202 CALCULUS II	5
CS120 STRUCT FORTRANA	4
ENG102 COMM SKILLS II	3
CHE101 GENERAL CHEMISTRY	5
	17

THIRD QUARTER	Hrs
MAT306 COMP ASSISTED STATS	5
CS140 ASSEMBLY LANG	4
EE110 INTRO ELECT ENGR I	5
PSY100 INTRO TO PSYCH	3
	17

SOPHOMORE YEAR

FOURTH QUARTER	Hrs
MAT302 DIFFERENTIAL EQ	5
CS240 COMP SYS ORG	4
EE220 INTRO ELECT ENGR II	5
ECO101 ECONOMICS	3
	17

FIFTH QUARTER	Hrs
MAT328 ADV ENGR MATH	5
EE250 LOGIC CIRCUITS	5
PHY102 TECH PHY I	5
ENG200 TECH RPT WRITING	3
	18

SIXTH QUARTER	Hrs
PHY201 TECH PHYS II	5
EE305 S-S MATR & DVCS	5
CS450 NUMERICAL ANAL	5
	15

JUNIOR YEAR

SEVENTH QUARTER	Hrs
EE307 CIRCUIT ANAL I	4
CS340 OPER SYSTEMS	5
CS390/392/394 COMP LANG	4
PHY320 MODERN PHYSICS	5
	18

EIGHTH QUARTER	Hrs
ME350 STAT AND DYNAM	5
CS440 COMP ARCH & PERF	4
CS448 COMPILER SYSTEMS	5
ENG301 BUS & PROF SPEECH	3
	17

NINTH QUARTER	Hrs
EE320 ELECTRONICS I	5
CS420 DIGITAL CTRL SYS	4
CS391 COMND PROCD LANG	4
HUMANITIES ELECTIVE	3
	16

SENIOR YEAR

TENTH QUARTER	Hrs
EE402 MICROPROCESSORS II	5
CS470 LIFE CYCLE ANALYSIS	4
EE322 ELECTRONICS II	5
HUMANITIES ELECTIVE	3
	17

ELEVENTH QUARTER	Hrs
EE405 DIGITAL CRCT DESIGN	5
CS474 LIFE CYCLE DESIGN	4
HUMANITIES ELECTIVE	3
TECHNICAL ELECTIVE	4
	16

TWELFTH QUARTER	Hrs
CS478 LIFE CYCLE IMPL	5
TECHNICAL ELECTIVE	5
TECHNICAL ELECTIVE	5
	15

Technical electives may be selected from any of the CAD, CS, COM, CPT, EE, ELT and MAT areas of the curriculum.
Humanities electives may be selected from any humanities or social studies area of the curriculum.

APPENDIX B

DEFENSE SYSTEMS MANAGEMENT (DSM)
COLORADO TECHNICAL COLLEGE

Graduation Requirements:
176 Quarter Hours Credit, Bachelor of Science Degree
with Areas of Concentration in One of Two Areas:
Configuration and Data Management (CDM)
Quality Assurance Management (QAM)

The Defense Systems Management (DSM) program is a combination of courses from two major disciplines. The first discipline includes Computer Science, Electronics, Mathematics, Physics and General Studies courses which occur during the first half of the program and provide the necessary technical foundation. Any associates degree from an accredited college may be used to meet this requirement. The second discipline includes the Defense System Management and Industrial Management courses which provide the technical management perspective and make up the junior and senior half of the program. The emphasis of the DSM program is on the application of defense systems management principles and concepts for the high tech environment which exists today. The combination of a broad associates degree and defense systems management will prepare a technical manager for the defense systems field.

The suggested sequence of study is provided below for the student's guidance in course scheduling. The sequence will insure achievement of degree objectives in the shortest possible time, provided course prerequisites have been met. The twelve quarters contain technical and free electives in which the student will choose courses which best meet their interests. Because of course prerequisites, electives usually cannot be taken earlier than the quarter in which they are listed.

SUGGESTED SEQUENCE OF STUDY

FRESHMAN YEAR

FIRST QUARTER	Hrs
ENG101 COMM SKILLS I	3
ENG110 WORD PROCESSING	1
ED100 ENGR GRAPHICS	3
ECO101 ECONOMICS	3
IM200 SUPERVISION	3
	13

SECOND QUARTER	Hrs
ENG102 COMM SKILLS II	3
MAT103 COLLEGE ALGEBRA	5
CS204 STRUCTURED BASIC	4
ELT100 DC FUNDAMENTALS	5
	17

THIRD QUARTER	Hrs
MAT104 TRIGONOMETRY	5
CS150 DATA PROC FUND	3
ELT101 AC FUNDAMENTALS	5
FREE ELECTIVE	3
	16

SOPHOMORE YEAR

FOURTH QUARTER	Hrs
PHY102 TECH PHYS I	5
CS250 DATA PROC MGMT	3
FREE ELECTIVE	3
TECHNICAL ELECTIVE	4
	15

FIFTH QUARTER	Hrs
PHY201 TECH PHYS II	5
CS100 STRCT PGM & FORTRAN	5
ENG200 TECH RPT WRITING	3
FREE ELECTIVE	3
	16

SIXTH QUARTER	Hrs
CS390 PASCAL	4
PSY100 INTRO TO PSYCH	3
ENG301 BUS & PRO SPEECH	3
TECH ELECTIVE	4
	14

JUNIOR YEAR

SEVENTH QUARTER	Hrs
DSM310 DOD SYS ACQ PROC	3
DSM320 DOD DOCUMENT TECH	3
CS394 STRCT ADA	4
FREE ELECTIVE	3
	13

EIGHTH QUARTER	Hrs
DSM360 S/W Q.A. TECH	3
DSM CONCENTRATION I	3
IM426 PROJECT MANAGEMENT	3
MAT306 STATISTICS	5
	14

NINTH QUARTER	Hrs
DSM330 CM TECHNOLOGY	3
DSM450 GOVNT CONTRCT ENGR	3
DSM CONCENTRATION II	3
IM413 PRDCT & QUALITY	3
CS251 ELCTR SPREADSHEET	1
	13

SENIOR YEAR

TENTH QUARTER	Hrs
DSM340 DM TECHNOLOGY	3
DSM430 CM ENGINEERING	3
DSM CONCENTRATION III	3
IM476 QNT DSCN MAKING	3
FREE ELECTIVE	3
	15

ELEVENTH QUARTER	Hrs
DSM420 DOD DOCUMENT ENGR	3
DSM440 DM ENGINEERING	3
FREE ELECTIVE	3
DSM CONCENTRATION IV	3
FREE ELECTIVE	3
	15

TWELFTH QUARTER	Hrs
DSM480 SYS ANLS/DSN/DEV	3
DSM CONCENTRATION V	3
IM420 PNCPL MTRLS CNTL	3
IM427 COST MAASUREMENT	3
FREE ELECTIVE	3
	15

Students must choose one of the two following areas of concentration and complete all courses in that area as a part of their degree requirements. Area courses which are taken, but not a part of the area of concentration may be used as technical/free electives;

therefore, students may investigate either concentration area before deciding which area is best for them. Concentration area sequences are as follows:

CONFIGURATION AND DATA MANAGEMENT (CDM) CONCENTRATION AREA

I DSM410 COMPUTER SYSTEMS AUDITING
II DSM425 DOCUMENT AUTOMATION
III DSM427 DOD CONTRACT PROPOSALS
IV DSM437 DATA ADMINISTRATION
V DSM445 DATA SECURITY AND CONTROL

QUALITY ASSURANCE MANAGEMENT (QAM) CONCENTRATION AREA

I DSM410 COMPUTER SYSTEMS AUDITING
II DSM461 SOFTWARE QUALITY ASSURANCE ENGINEERING
III DSM467 DEFENSE LOGISTICS AGENCY/DEFENSE CONTRACT ADMINISTRATION SERVICES (DLA/DCAS) ENGINEERING
IV DSM465 HARDWARE QUALITY ASSURANCE ENGINEERING
V DSM469 QUALITY ASSURANCE ENGINEERING MANAGEMENT

Technical electives may also be selected from any of the CAD, CS, COM, CPT, EE, ELT and MAT areas of the curriculum.
Free electives may be selected from any area of the curriculum.

APPENDIX C

COLORADO TECHNICAL COLLEGE

JOB DESCRIPTION

1. JOB TITLE: Associate Dean/Department Chairperson (10)

2. DEPARTMENT: Education

3. BASIC FUNCTION: Serves on the Executive Committee and plans, organizes, and directs the educational activities of the academic department(s) to which assigned with the main objective of creating a positive, student oriented environment in which the academic department(s) can accomplish their goal of motivating and educating our students.

4. SCOPE: Responsible for all aspects of the administration of assigned academic departments/programs, including day-to-day operations.

5. WORK PERFORMED:

   a. Supervise assigned faculty.
   b. Perform classroom evaluations of assigned faculty.
   c. Prepare performance evaluations for assigned faculty.
   d. Recruit qualified faculty as openings occur.
   e. Work with the faculty in the development, revision, and coordination of departmental curricula.
   f. Ensure that all accreditation requirements are met.
   g. Form advisory boards for each academic program, schedule periodic meetings, and maintain close liaison with industry.
   h. Support and enforce all rules and policies of the College.
   i. Provide short- and long-term departmental plans.
   j. Ensure the safety and security of assigned employees, students, records and physical assets.
   k. Advise students in academic matters.
   l. Perform transfer of credit evaluations and make recommendations to the Registrar.
   m. Teach one course per quarter, as required.
   n. Other duties and responsibilities as assigned.

6. SUPERVISION EXERCISED:

   a. Positions Directly Supervised
   Faculty Members

   b. Positions Indirectly Supervised
   None

7. SUPERVISION RECEIVED:

a. Supervisor
Vice President of Academic Affairs/Dean

b. Supervision Received
General direction on operating procedures, specific direction concerning goals and strategic decisions. Weekly staff meetings with the Dean. Periodic executive meetings with the President.

8. RESPONSIBILITY/AUTHORITY:

a. Employee Relations
Manage the recruiting, supervision and evaluation of faculty members assigned. Responsible for maintaining harmonious employee, customer, and professional relations.

b. Equipment
Responsible for all equipment assigned to the academic department.

c. Money
Responsible for budget control as related to the academic department.

d. Business Contacts (Internal and External)
Frequent contact with students, faculty members, administrative personnel, college officials, advisory board members, and other industry representatives. Must be pleasant, cooperative, tactful, and on occasion discreet. Must exercise good judgement as to when to give out or withhold information.

9. MINIMUM REQUIREMENTS:

a. Education and Experience Required
- Doctoral degree in a related field with 10 years of experience in teaching, industry and supervision. Experience in education, teaching, industry and supervision required.
- Prefer--15 years of experience: 7 years of industrial experience, 3 years of supervision/management experience, and 5 years of teaching/education experience.

b. Knowledge Required
- Hands on industry experience
- Subject matter expertise
- Strong interpersonal skills

10. DATE DEVELOPED/UPDATED: December, 1986

I have read, agreed to, and received a copy of this job description. I also agree that any books received for review are the property of Colorado Technical College.

NAME _____ DATE _____

APPENDIX D

COLORADO TECH

EMPLOYEE TRAINING/PROFESSIONAL DEVELOPMENT

Name Karen Nauman Date of Hire 22 Dec 86

Position/Department Receptionist

When filling out this form, please specify the type of training/development under "type" by inserting the appropriate letter: conference (C), seminar (S), workshop (W), or self-improvement program (I).

DATE	TYPE	DESCRIPTION	HOURS
10 Feb 87	I	Personal Profile - Personal Behavioral Tendencies	2
6 Apr 87	W	Team Development - Pro Systems goal setting	3
29 May 87	W	Team Development - Pro Systems consistent adherence to daily & specific times of customer	1
22 Jul 87	W	Passion for Excellence (Tom Peters) film, concepts, discussion	2

Form CT - 100

TRAINING DATE: 22 Jul 87 TOTAL HOURS:

SUBJECT: Passion for Excellence

LOCATION: Rm 204 CT

FACILITATOR:
Prochaska

MEMBERS ATTENDING:

Bob Shurtleff
Hali Mendez
Steve Ranzinger
Bill McPeek
Jack Beale
Bob Refior
John Harrell
Jack Bernard
John Zingg
Karen Nauman
Bill Butiello
Jack Kenny
Leonard Silence
Ruth Schneebeck
Ralph Thomas
Rick Rayborn
Dan Kaelin
Anita Hix
Faith Edgar

SPECIFIC NOTES:
- students are not goal oriented (objectives)
- survey measuring service is needed

F.J. Prochaska, Ph.D.
7648 THUNDERBIRD LANE/COLORADO SPRINGS, CO 80919/(303) 598-2984

APPENDIX E

Colleges and universities

Adelphi Business College 475-1700
824 S. Union Blvd.
Basic program: The college is a private coeducational institution that trains students for careers in accounting, secretarial work, fashion and retail merchandising, interior design and word processing

Air Force Academy 472-2640
USAF Academy 80840
Basic program: The Air Force Academy provides instruction and experience to cadets in preparation for their careers as officers in the Air Force.

Army Education Center 579-2124
Building 2217 or 579-5226
Fort Carson
Basic program: The Army Continuing Education Center offers all adult education programs at Fort Carson. The following institutions have programs on post at Fort Carson: Central Texas College, Pikes Peak Community College, University of Colorado at Colorado Springs, Southern Illinois University, University of Southern Colorado, University of Southern California, University of Northern Colorado and St. Mary's Adult High School.

Beth-El School of Nursing 475-5170
10 N. Farragut or 475-5171
Basic program: The college offers a baccalaureate degree in nursing; continuing education classes for registered nurses and allied health professionals; a nine-month post-graduate practitioner course in neonatal nursing, which begins in January; and a six-month post-graduate practitioner course in operating room nursing beginning in December.

Blair Junior College 574-1082
828 Wooten Road
Basic program: Blair offers both two-year associate degrees and shorter term diploma programs, preparing students for jobs in business and industry. Associate degrees are offered in electronics, computer science, accounting, business administration, travel and tourism. One-year diploma programs are offered in junior accounting, medical administrative assistance, word processing, secretarial science and travel and tourism.

WA
Chapman College 597-0445
P.O. Box 14085 or 593-0970
Peterson Air Force Base 80914
Civilian Center: 4710 Flintridge Drive
Basic program: Bachelor's degrees are offered in computer science, electronics, computer information systems, business administration and criminal justice. Master's degrees are offered in marriage, family and child counseling, human resources, business administration, health administration and sports medicine.

NCA
Colorado College 473-2233
Colorado Springs 80903
Basic program: Colorado College offers a traditional liberal arts curriculum. Bachelor of arts degrees and a master of arts degree in education are offered. The school is one of two in the country operating on the block system, where the academic year is divided into nine 3½-week sessions during which students typically take a single course.

NCA
Colorado State University 574-2681
538 Lakewood Circle
Basic program: Graduate courses are offered on videotape for a master's degree in computer science, business administration, agricultural and chemical engineering, civil engineering and mechanical engineering.

Colorado Technical College 598-0200
655 Elkton Drive
Basic program: Associate of science and bachelor of science degrees are offered in biomedical engineering technology, computer science and electronic engineering technology. Bachelor's degrees are offered in electrical engineering and industrial engineering technology.

Cornerstone Baptist Bible College 593-7887
3615 Vickers Drive
Basic program: Pastoral studies and Christian education programs are offered leading to a two-year pastoral certificate and a four-year degree.

Emery Aviation College 632-8116
1955 N. Union Blvd.
Basic program: The college offers a full range of airplane and helicopter flight courses with emphasis on associate degree programs in aviation technology with majors for the commercial/instrument-rated pilot flying either fixed-wing airplanes or helicopters.

Institute for Business and Industrial Technology 578-5500
332 E. Willamette Ave.
Basic program: Industrial training is a federally funded program under the Job Training Partnership Act. It is designed to assist residents of El Paso County with training in areas such as electronics, machining and assembly, on-the-job training and customized training for employers' needs.

National College 471-4205
2577 N. Chelton Road
Basic program: Bachelor's and associate degrees are offered in computer information systems, business administration and applied management. A two-year degree is offered in travel and airlines, and a one-year diploma is offered for accounting clerks.

Nazarene Bible College 596-5110
1111 Chapman Drive
Basic program: The three basic programs of education are Biblical studies, preparation for a preaching ministry; Christian education, preparation for associate church work; and church music for church music ministry.

Pikes Peak Community College 576-7711
5675 S. Academy Blvd.
Basic program: The college is designed to meet the needs of local residents who plan to transfer to four-year colleges, want to take courses for their own enrichment or need vocational training. PPCC is designated the High-Tech Training Center in microelectronics for Colorado. There are two satellite campuses: the Downtown Studio at 19 N. Tejon St. and the Rampart Campus at Rampart High School, 8250 Lexington Drive. Courses are offered by semester.

NCA
Regis College 634-3706
2330 Robinson St.
Basic program: Working adults are enrolled in career programs. The school offers a master's degree in business administration, bachelor of science degrees in business administration, computer information systems, computer science and management and technical management.

Southern Illinois University 576-6890
Building 2226, Fort Carson
Basic program: Courses are offered on alternating weekends leading to bachelor of science degrees in aviation management and health care management.

Technical Trades Institute 632-7626
2315 E. Pikes Peak Ave.
Basic program: The institute specializes in career programs for adults in the fields of electronic engineering, computer and television repair, engineering-design drafting, refrigeration/air-conditioning, major appliance repair and interior design.

NCA
University of Colorado at Colorado Springs 593-3000
Austin Bluffs Parkway
Basic program: The university's academic divisions are: College of Business Administration; School of Education; College of Engineering and Applied Science; College of Letters, Arts and Sciences; the Graduate School; Graduate School of Business Administration; Graduate School of Public Affairs; and Division of Continuing Education.

WA
University of Southern California 576-6109
Fort Carson, Army Education Center
Bldg. 2226
5050 Edison Ave. Suite 201
Colorado Springs 597-1761
Basic program: USC's Institute of Safety and Systems Management offers the master of science degree in systems management through Fort Carson and Colorado Springs.

NCA
University of Northern Colorado 576-7832
Army Education Center
Building 2217, Fort Carson 597-8577
Education Center
Peterson Air Force Base 472-2898
Education Center
United States Air Force Academy
Basic program: Graduate degree programs are offered in agency counseling and communications with an organizational focus.

NCA
University of Phoenix 1-755-9090
3151 S. Vaughn Way, 1-800-441-2981
Aurora 80014
Basic program: The university offers programs designed for working adults: bachelor's in business administration, bachelor's in management, master's in business administration, master's in management with an emphasis on human relations and organizational behavior, bachelor's in nursing, and master's in nursing administration. The university holds once-a-week evening classes at businesses and other sites in Colorado Springs and Denver.

University of Southern Colorado 576-7832
Building 2220, Fort Carson 574-3312
Building 1141, Peterson A.F.B.
Basic program: Courses at the upper-division level (third and fourth-year students) are offered in mass communication, history, math, political science, psychology, sociology and many other topics. Bachelor degree programs are offered in business administration, social work, computer science technology, social science and recreation.

NCA
Webster University 590-7340
Education Center, Bldg. 1141, Peterson Air Force Base
Basic program: Master's degree programs are designed for early and mid-career professionals. Webster offers course work leading to degrees in business, management, procurement, materials management, computer resources management, space systems management and a master's degree in business administration.

NEWS RELEASES

FINANCE

Greenspan pledges to resist pressures

Associated Press

WASHINGTON — Federal Reserve Chairman-designate Alan Greenspan pledged on Tuesday to keep the central bank above political pressures and said his main job would be to guard against any threats of a renewed inflationary spiral.

Meanwhile, departing Fed Chairman Paul Volcker said he was encouraged by the economy's current performance and said the central bank planned no major changes in its handling of monetary policy.

They testified before different congressional committees.

Volcker was making one of his last appearances before Congress after eight years as head of the central bank. Greenspan appeared before the Senate Banking Committee which is considering whether to recommend Senate confirmation of President Reagan's nomination of him to succeed Volcker.

Sen. William Proxmire, D-Wis., chairman of the Senate committee, was one of Greenspan's toughest questioners but predicted the nominee would win overwhelming Senate confirmation. Volcker's term ends Aug. 6 and officials expect Greenspan's nomination will have cleared the Senate by that time.

Several senators questioned how independent Greenspan would be given his background as a conservative Republican economist who served as chairman of the president's Council of Economic Advisers during the Nixon and Ford administrations.

Proxmire noted Greenspan will be joining a board made up completely of Reagan appointees. He asked whether they would be able to resist potential pressure from the administration to forget about inflation worries and concentrate on boosting economic growth in order to help Republicans retain the White House next year.

Greenspan repeatedly said he would resist all efforts to compromise the political independence of the central bank.

"It is conceivable that my actions could be wrong, but it will not be because of politics," he said. "It is important for the Federal Reserve to retain its independence and I will do everything I can to make sure that occurs."

Asked during his hearing whether he had any advice for Greenspan, Volcker said, "Scratch, fight, complain — whatever is necessary to make the point to Congress and the American people" of the need for a strong, independent

See FED/page B10

Alan Greenspan

EDUCATION

Colorado Tech moving to larger campus

Enrollment up 150 percent over last year

/ayne Hellman
Gazette Telegraph

Colorado Technical College will lease two of three buildings in the Springs Business Park at 4435 N. Chestnut St. to accomodate the 22-year-old school's growing enrollment.

Colorado Tech President David O'Donnell said Tuesday that the school will move in mid-September from its location for the past 10 years at 655 Elkton Drive to the first of the two buildings. He said the school's enrollment grew nearly 150 percent from a year ago to 608 students this fall, straining the capacity of the Elkton Drive building.

"We are growing quickly. We expect 800 students in the fall semester," O'Donnell said. "We are still, to a great extent, a secret in the community. We believe our new building will help change that by giving better visibility, as well as more room."

Next year, Colorado Tech will expand into the second building, which will increase its enrollment capacity to between 1,600 and 2,000 students, O'Donnell said. Additional land will be leased for parking, O'Donnell said.

Paul Turner, research director for Grubb & Ellis Co., said Colorado Tech's lease for the two buildings, which total 80,000 square feet, will be the largest commercial lease signed since Optical Storage International Inc. leased 171,000 square feet in the ArrowsWest development in northwest Colorado Springs late in 1985.

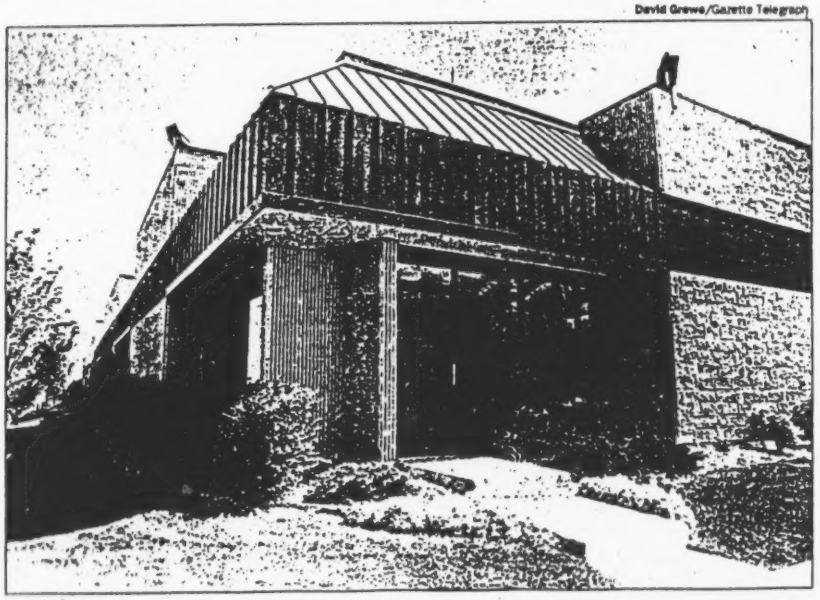
The college has 47 full time and part-time faculty members and is edited by the North Central Association of Colleges and Schools. It offers a four-year degree in industrial management and two- and four-year degrees in electrical engineering, electrical engineering technology, computer science and biomedical engineering technology.

The school has thrived since O'Donnell took over as president early last year, when financial problems nearly forced it to close. Since then, Colorado Tech has spent $2.5 million expanding its computer laboratories and buying new equipment.

Colorado Tech agreed in June to buy 35 to 50 personal computers from San Jose, Calif.-based Scorpion Technologies Corp. and make nearly 4,000 others available for sale to its students during the next five years, O'Donnell said. The company also recently agreed to buy a $350,000 mainframe computer from Prime Computer Corp., which made a $150,000 grant to the school.

Springs Business Park is owned by San Francisco-based Drever McIntosh and Co. Inc., which bought the building in 1984 for $9.05 million. The buildings had been leased to Digital Equipment Corp. until early 1986.

David Grewe/Gazette Telegraph



Gazette Telegraph library

David O'Donnell, president of Colorado Technical College, shown above in one of the college's computer classrooms, announced Tuesday that the college will lease two buildings at the Springs Business Park, top photo. O'Donnell said the move was to give the school greater visibility and to provide space for the growing number of students.

AVIATION

Continen chief lea

Associated Press

HOUSTON — Thomas G. P president and chief executive Continental Airlines, has resi Air Corp. Chairman Frank Lo named to succeed him, the air

Plaskett joined Continental November after working 12 y American Airlines, based in D. is the holding company for Co.

Texas Air's Board of Direct Tuesday that Lorenzo was ask direct management of the airl. posted a second quarter loss o Monday. No replacement will Plaskett.

Lorenzo said the board exp satisfaction with the airline's operating improvements in re achievement in which Mr. Pla significant role."

A statement released Tuesd Air did not say why Plaskett r telephone calls to airline offic immediately returned.

Texas Air, meanwhile, said million during the second quar because of widening losses at

But the loss was down subs the $66.2 million loss the comp in the year-ago quarter. The 1 restated to reflect losses at Ea proportionate to Texas Air's h company one year ago, compa Rick Scott said Monday.

For the second quarter of 19 Continental reported a net loss million on revenue of $948.6 m results reflected consolidation results for People Express, Ne Frontier, all of which have bec owned Continental subsidiaries

In the year-ago quarter Cont $56.8 million, which included $ banruptcy-related charges and reorganization costs, a spokesn

The company's Eastern Air l turned a profit of $27.1 million quarter before a $14.6 million was made for preferred divide second quarter of 1986, Easter million.

"While we are encouraged w progress at Eastern, the results Continental, which reflect large continuing impact of integratin airlines, are disappointing," Lo

Texas Air reported revenue quarter of $2.16 billion, up abo from $539.6 million in the year

New D-20 Science Outreach Center starts following county OK
See Page 5

Mountain View head sends letter explaining PTO dinner funding
See Page 7

Doonesbury playing matchmaker

See Page 2

Northern Light

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Vol. V No. 29 P.O. Box 25626 Colorado Springs, CO 80936-5626 July 23, 1987

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Privately funded interchange opens

Repeatedly emphasizing that the $7.2 million pricetag is being paid for by private sources, Briargate officials joyfully opened their new Interstate 25 freeway interchange Tuesday.

A string of Model A cars — led by a Model A dump truck — broke a banner opening the long-awaited freeway interchange slighly more than a mile north of the present freeway interchange at the south entrance to the Air Force Academy.

Vintage Communities President Lew Christensen, a principal developer of Briargate, told the audience of area dignitaries and politicians that a trip to Africa taught him a lot about the gestation period of certain animals.

"Here, the gestation period of a freeway interchange is 60 months," he joked.

The freeway interchange grew from Briargate's annexation agreement with the city in 1982, Christensen and Mayor Robert Isaac emphasized Tuesday.

Isaac said, "This is one of the best examples of the public-private approach, mainly private.

"This type of new activity and new growth is paid for by this area. It'll be paid by assessment liens on 2,000 acres.

"This is not a drain on tax dollars."

Several officials noted that while several freeway interchanges in Colorado have been paid for with mainly private funding or through public bonds, this is the first completely privately funded freeway interchange in Colorado.

Christensen said a special improvement maintenance district issued bonds a year ago and those bonds will be paid for by assessments on land that will be sold in the nearby Briargate Business Campus in the next 15 years.

If the interchange had been paid for by state taxpayers, it would have meant a half-cent sales tax on every person in Colorado for one year, Christensen said.

Developers originally thought the interchange would cost $3.5 million — slightly less than half the final costs — but new safety standards and a desire for a more attractive than usual interchange raised those costs, he said.

Saying it had been nicknamed the "Designer Interchange, complete with brown accent stripe," Christensen said developers "saw an opportunity to build an attractive, super entrance to Briargate."

Briargate Business Campus tenants will be paying assessments for the maintenance of the interchange's landscaping, so there will be more landscaping as the campus attracts more businesses, Christensen said.

Bill Hurt, marketing director for the business campus, said the interchange already has been crucial in the decisions for developers of the Birtcher-Kraus office building and the United Services Automobile Association building to locate in the fledgling business campus.

"This really accesses a major concern to business," Hurt said.

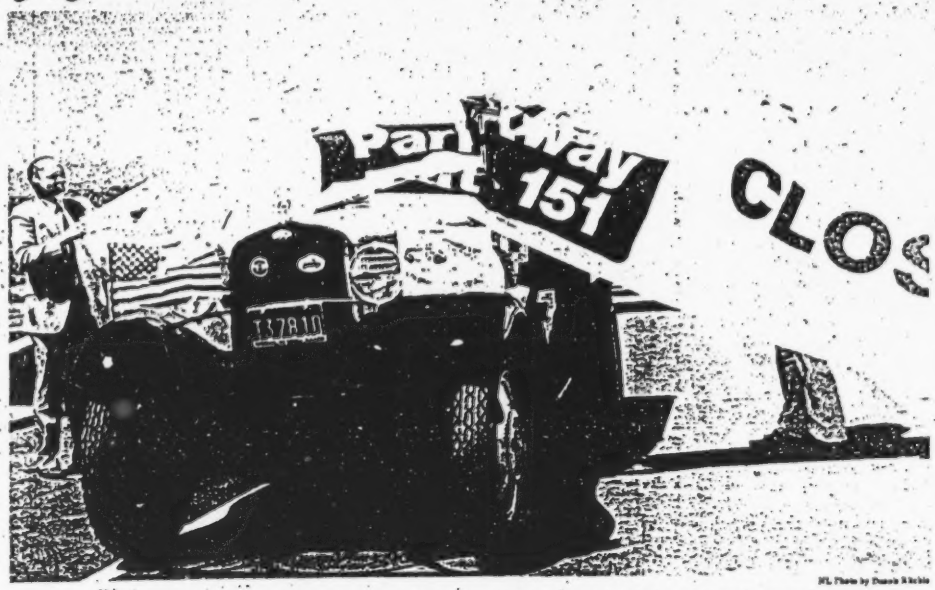
"Businesses will build next to a freeway for the ease of access.

"Certainly, this also shows the community that we're following through with the city agreement."

Construction on the interchange began slighly more than a year ago by Flatiron Structures of Boulder.

URS Engineers of Colorado Springs was the engineering firm for the project.

The equivalent of 40,000 dump truck loads of earth was moved during construction.



Vintage Communities President Lew Christensen holds the banner noting the opening of the Briargate interchange on I-25 Tuesday.

New U.S. Post Office branch opens Monday

By Rema M. Vescosi

Briargate residents can take advantage of a new mini-post office opening Monday in the Chapel Hills Plaza.

In addition to regular postal services, the new branch will house 1,000 post office boxes available for rent on a first-come, first-rent basis.

According to Debbie Orion, manager of the new location, "There will be plenty of parking and easy access to the building, as well as parking for the handicapped."

Orion said a permanent branch is planned to replace this location within the next three to five years.

In mid-August, the Post Office will open another branch in the Rockrimmon area.

Lobby hours are from 7-7 p.m. Monday through Friday, and from 7 - 4:30 on Saturday. Retail windows will be open from 7:30 - 5:30 Monday through Friday, and on Saturday from 7:30 - 3 p.m.

The Chapel Hills Plaza Branch is located at 7870 N. Academy Blvd.

Colorado Tech

School Will Triple In Size

Colorado Technical College is moving into buildings that will nearly triple its present size, college officials said today (Thursday).

About 850 students will move into the first phase of the new expansion when the fall quarter begins October 6th, college President David O'Donnell told a press conference.

The new 80,000 sq. ft. building will be in the Springs Business Park, which is between Chestnut and Garden of the Gods.

The business park is identified by a digital clock tower facing I-25.

Tremendous growth in the number of students is making necessary the expansion from a 30,000 sq. ft. building on Elkton Drive, which is just north of Garden of Gods Road.

By the fall quarter of 1988 when the second phase of the expansion should be completed, about 1,200 students are expected to be enrolled there, O'Donnell said.

The college will be offering a bachelor of science degree in defense systems management.

College officials said the new degree program will acquaint students with the intricate, technical aspects of obtaining and maintaining contracts with the Dept. of Defense.

Some structured training is necessary for the many people having to deal with all the regula- tions of the Pentagon, college officials said.

With the expansion there will be a doubling of the faculty at the college, O'Donnell said.

"Counting full - time and adjunct faculty, we have 78 employees today," O'Donnell said.

"By the winter of 1988-89, we should be close to doubling that," he added.

The new students and faculty will enjoy "state-of-the-art equipment" in the new building that will be designed very similar to high tech industry environments, O'Donnell said.

About 60 percent of the students are already working in local industries, O'Donnell said.

State patrol to begin using oxy fue

By DICK FOSTER
Rocky Mountain News Southern Bureau

COLORADO SPRINGS — Critics who want proof that oxygenated fuels will not damage auto engines will get it, Gov. Roy Romer said yesterday after ordering the Colorado State Patrol to begin immediate use of the blended fuels in patrol cars.

At an afternoon news conference, the governor announced the program in response to criticism by Rep. Tom Ratterree, R-Colorado Springs.

Ratterree has claimed that Front Range motorists are being ordered to use cleaner-burning oxygenated fuels beginning next November without sufficient testing to determine whether they will cause engine damage.

The oxygenated fuels program, passed in June by the state Air Quality Control Commission, requires motorists from Fort Collins to Colorado Springs to use either ethanol- or MTBE-blended fuels during winter months to reduce carbon monoxide pollution.

Romer said other state fleets also will switch to blended fuels in weeks to come, and he plans to jawbone corporate officials, urging them to test blended fuel in private fleets.

"I spoke to (state patrol Chief) John Dempsey this morning," Romer said. "The state patrol will begin using MTBE (one of two oxygenated fuel blends) tomorrow out of its Denver office. As soon as storage tanks are empty in Fort Collins and Colorado Springs, they'll switch to MTBE."

"The reason for this is a demonstration to show that it works. There's no more demanding a group than the State Patrol," the governor said.

Romer's announcement came only three hours after Ratterree announced plans to introduce a bill in the legislature Aug. 11 to delay the scheduled start of the blended fuels program from this November to November 1988, to allow for testing of the fuels during winter driving conditions.

"I'm not asking for repeal of the blended fuels program. I am asking for a delay so that we can prove to the citizens of Colorado that the program works," Ratterree said. "No one has tested these fuels at our altitude in everyday driving."

Romer disagreed, saying ethanol had been used successfully for several years in parts of Nebraska that are at 5,000 feet in elevation, like much of the Front Range.

The governor said opposition to the program is far more intense in Colorado Springs than in the Denver area, where carbon monoxide pollution is second-highest in th surpassed only by Los Angeles.

"In the Springs there is a nucleus of folks who h excited about it and have fanned misunderstanding said Romer. "That feeling is not shared elsewh Front Range."

Romer said he was "as interested as anybody blended fuels perform properly, but he has been as they do by auto dealers and manufacturers and by of the fuels.

"We ought not allow this to mushroom into a that this is going to ruin our cars, because it's Romer.

Front Range pollution already is taking a toll c do's potential economic development, Romer said.

"One officer from a big corporation told me h recruit people in Denver during the winter beca come in and see the brown cloud," said the gover

"We can't leave this problem for another year, "I'm here to tell you that in Denver we've got t grips with it or our economic future is going t nished."

Defense major helps boost college's size

By STEPHEN BOBBITT
Rocky Mountain News Southern Bureau

COLORADO SPRINGS — The public's interest in electronics and a new degree in defense management is tripling enrollment at Colorado Technical College, pushing the school into bigger buildings this fall, its president said yesterday.

"In the last two years our enrollment has sen from 240 students to 614," said David O'Donnell at a news conference. "We expect about 850 by this fall and 1,200 by the fall of 1988."

THE COLLEGE opened in 1965 in Manitou Springs as a training school for radio and television technicians, O'Donnell said. Now accredited by the North Central Association of Colleges and Schools, it offers a maximum class size of 30 students per teacher, O'Donnell said.

"This fall we will be the first college in the country to offer a degree in defense systems management," O'Donnell said.

John Zingg, dean of the college, said the new degree will train students in how to get and keep defense contracts.

O'Donnell, who became president of the privately operated college last year, said the growth in enrollment is forcing the school to move out of its 30,000-square-foot building at 655 Elton Drive, just north of high-tech companies lining Garden of the Gods Road.

The school's two new buildings, which total 80,000 square feet, are in Springs Business Park at 4435 N. Chestnut St., about three blocks south of the existing campus.

O'Donnell said a $1 million renovation of the buildings will be complete this fall.

STUDENTS COME to the college because "they're tired of being treated like numbers" at large colleges and universities, and they want to learn skills that will enable them to get a job right after graduation, O'Donnell said.

Helen Sullivan, vice president of industri elations for Colorado Technical College . the college arranges employment for an average of 95% of its graduates.

"Most are placed in local industries, some in California and all in high-tech," she said.

"This year we placed 100% of our graduates," Sullivan said. "Most of them get on-the-job industrial experience with local companies during their junior and senior years."

O'Donnell said cost of a four-year degree program is about $20,000.

ASSOCIATED PI

Air Force Academy cadet Cy Whinnery, 21, shook hands with Maj. John Quin, of Britain's Royal Engineers, before entering the water at Dover Wednes for his ill-fated attempt to swim the English Channel

Academy cadet rescued in channel bi

DOVER, England (AP) — A U.S. Air Force Academy cadet was hospitalized yesterday after he nearly drowned trying to swim the English Channel, a hospital official said.

Cy Whinnery, 21, of San Antonio, Texas, "was picked up out of the water after nearly drowning," said Nicola Foad, a deputy unit administrator at Buckland Hospital in Dover. "He'd inhaled a lot of sea water."

Whinnery was listed in stable condition and was expected to leave the hospital in several days, Foad said.

The Channel Swimming Association s Whinnery was pulled from the chan Wednesday night into an escort boat af he had been swimming for seven hours

Whinnery had set off from Dove Shakespeare Beach on Wednesday mo ing.

Greeley OKs oil, gas drilling in parts of cit

GREELEY (AP) — Oil- and gas-well drilling will be allowed in some parts of the city under a plan approved by the Greeley City Council this week.

Council members voted 5-1 to allow the drilling after hearing from four supporters of a partial repeal of the city's drilling ban imposed in 1985.

The vote taken Tuesday means drillers will be allowed to sink oil and gas wells in industrial parts of Greeley if they receive land-use permits from the city planning commission and the city council.

Councilman Peter Boer voted against the plan, saying that allowing wells in industrial areas could thwart economic development.

"People will not build a plant in an area where someone can come in and drill a hole and pump oil and gas out of it," Boer said.

The council's decision did not totally appease oil and gas developers. Bill S director of the Colorado Oil and Gas C vation Commission, called the council's sion "a very small crack in the door" le producers back into the oil and gas fie

Ed Eppich, a lawyer representing wether Exploration Co., asked council bers to allow drilling on industrially property automatically instead of b special review process.

STATE & REGION

Tech college 1st to offer degree in defense systems

By Jim Gibney
Special to The Denver Post

COLORADO SPRINGS — A private Colorado technical school will be the first in the nation to offer students a bachelor's degree in defense systems management, the college's president said Thursday.

Colorado Technical College has launched a $1 million expansion project and expects to increase its enrollment to 850 students this fall, college President David O'Donnell said Thursday.

O'Donnell said he believes the four-year curriculum in scientific fields will bring more aerospace industries to Colorado Springs.

The school's summer enrollment last year was 240 and is now 614 students.

More than 850 students are expected to enroll for the fall semester when classes begin Oct. 5. Tuition for the program — which offers a total of 196 credit hours — will be $5,000 a year.

Colorado Tech will move in October to a new campus on a 13-acre tract in Springs Business Park where a 52,000-square-foot building formerly occupied by Digital Corp. is being renovated, O'Donnell said.

Future plans call for the college to add an adjoining 28,000-square-foot building in September 1988, with a one-acre open campus connecting the two academic buildings.

The school, which first opened in Manitou Springs in 1965 as a radio and television repair school, now occupies a 30,000 square foot building on Elkton Drive in northwest Colorado Springs.

Dean John Zingg said the rapidly increasing enrollment is apparently due to a flood of students looking for careers in the technical fields.

Zingg, a retired Air Force lieutenant colonel, formerly headed the Astronautics and Computer Science Department at the U.S. Air Force Academy.

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New emissions test flunks more cars

84

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